

**Active purchasing mechanisms of private healthcare services: experiences of public
and private purchasers in Kenya**

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ABSTRACT

There has been growing global attention to Universal Health Coverage (UHC) and countries across the world have placed achievement of UHC amongst their top policy priorities. UHC is defined as ensuring that all citizens can access relevant health services whenever they need care in a manner that ensures they are not exposed to financial hardship. Health financing systems are critical to achieving UHC- one of the building blocks of a health system, health financing is concerned with the mobilization, accumulation and allocation of funds to cover the needs of a population. The purpose of a health financing system is to make funding available, set the right incentives to health care providers and to ensure all individuals have access to effective public and personal health services. A health financing system has three inter related functions; revenue collection, pooling and purchasing which all need to work together for achievement of UHC.

Purchasing is defined as the allocation of pooled funds to providers in exchange for medical services. Purchasing can be *passive* (whereby purchasers simply pay bills presented by providers) or *strategic* (whereby purchasers continuously apply evidenced based decisions and processes when allocating funds to providers to maximize value). Many countries aiming to achieve UHC have prioritized shifting from passive to strategic purchasing as part of their health financing system reforms. Literature shows evidence that implementation of strategic purchasing can contribute to achieving UHC by: aligning funding and incentives with promised health services to promote access; linking transfer of funds to providers to performance with the goal of promoting quality in service delivery; and enhancing equity in resource distribution. Implementation of strategic purchasing mechanisms is however not a straight forward process as providers can use various sources of power such as: monopoly and

bargaining capacity; some provider payment mechanisms such as fee-for-service; and information asymmetry to resist the adoption of strategic purchasing mechanisms. Providers are likely to resist implementations of those mechanisms that they perceive will shift too much of the risk of providing care to them or will erode their economic gains. Purchasers also have sources of power they can use to influence implementation such as: institutional regulatory authority; monopsony and bargaining authority; and some provider payment mechanisms such as capitation. Power in this study is defined as a relation between two parties whereby party A is said to have power over party B to the extent that A can get B to do something that B would not have otherwise done.

Kenya has in the past decade formulated and implemented various policies towards achieving UHC, including reforming some of its purchasing functions. An example is the introduction of capitation (a provider payment mechanism) for private providers, by the public purchaser-National Hospital Insurance Fund (NHIF). Private purchasers have, as part of strategic purchasing, intervened in clinical decision-making processes amongst private providers as a way of managing costs and improving quality. Existing literature shows public and private purchasers in Kenya are faced with multiple challenges when implementing strategic purchasing mechanisms such as lack of technical expertise, poor planning and resistance from some providers.

This study explored the implementation of strategic purchasing mechanisms by NHIF and private purchasers amongst private providers in Kenya to understand the role of various sources of power in influencing implementation outcomes (acceptability and adoption) in order to contribute to work on how to implement strategic purchasing. Private providers in

Kenya play a significant role in provision of care and over 40% of facilities in Kenya are privately owned.

We employed a multiple case study design. The first case focused on implementation of capitation by the public purchaser NHIF. The second case focused on the implementation of select strategic purchasing mechanisms by private purchasers including intervening in clinical decision-making processes, use of preauthorization and use of specialists for second opinions amongst others. In total eight interviews were completed and eighteen documents (including newspapers articles, documents from websites, and provider-purchaser contracts) were included as data sources. Each case was analysed individually using thematic analysis, after which a cross case analysis was completed.

Our findings show that in the first case of the NHIF purchaser, NHIF used its regulatory authority to gazette and hence dictate the capitation rate to providers. NHIF also used its monopsony to convince providers that there would be significant economic gains from the capitation model as NHIF had a huge number of beneficiaries. However, some of the large providers used their monopoly and bargaining capacity to walk away from the scheme as they still commanded significant market share even without the NHIF capitation business as they felt the proposed capitation rate was too low. In the second case, private purchasers used contracts as a source of power to give them some authority to control prices of services and ensure providers adhered to strategic purchasing mechanisms such as use of preauthorization processes. Some private providers on the other hand used various sources of power to resist implementation such as information asymmetry to by-pass some of the documentation requirements set by the private purchasers. Some providers also used monopoly and fee-for-service payment mechanisms to dictate prices of services to purchasers. Some private

providers did however willingly adopt some of the strategic purchasing mechanisms namely: preauthorization processes and use of step-down facilities as they felt these minimized the risk of unpaid claims. Across the two cases, NHIF seemed to have had relatively more power over providers compared to private purchasers. For example, NHIF gazetted the capitation rates and did not revise them despite strong opposition from some of the large private providers, whilst private purchasers complained that some of the large private providers always had their way by dictating prices of their services to the private purchasers.

Whilst there have been a growing number of recent studies touching on strategic purchasing in Kenya, few of them have focused on the role of power and/or implementation of strategic purchasing in Kenya. This study focused on how various sources of power for providers and purchasers can affect implementation of strategic purchasing in order to provide insight into the implementation of strategic purchasing mechanisms. The study found that private providers can use their various sources of power to resist adoption of strategic purchasing mechanisms they do not deem acceptable; some mechanism are however deemed acceptable and are willingly adopted. The study also highlights that purchasers can use their sources of power to influence adoption of strategic purchasing amongst providers. The study hopes to provide insight to policy makers and purchasers on the need to consider the role of power when implementing strategic purchasing mechanisms and to plan accordingly. One general lesson on implementation includes the importance of early communication and dialogue when implementing strategic purchasing mechanisms.

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List of abbreviations

CBHFS	Community Based Health Financing Schemes
GDP	Gross Domestic Product
NACC	National Aids Control Council
NASCOP	National Aids & STI Control Programme
NHIF	National Hospital Insurance Fund
OOP	Out-of-Pocket
THE	Total Health Expenditure
UHC	Universal Health Coverage
WHO	World Health Organization

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Abbreviations

AKI	Association of Kenyan Insurers
CBHIS	Community Based Health Insurance Scheme
DRG	Diagnostic Related Grouping
FFS	Fee-For-Service
GOK	Government of Kenya
LMIC	Low and Middle-Income Countries
NACC	National Aids Control Council
NASCOP	National AIDS and STIs Control Program
NHIF	National Hospital Insurance Fund
OOP	Out-of-Pocket
P4P	Private for Profit
PBP	Pay-for-Performance
THE	Total Health Expenditure
UHC	Universal Health Coverage
USA	United States of America
WHO	World Health Organization

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PART A

PROTOCOL

1. INTRODUCTION

Health financing as defined by the World Health Organization (WHO) is the “function of a health system that is concerned with mobilization, accumulation and allocation of money to cover the health needs of the people” whereby the purpose of health financing is “to make funding available as well as to set the right financial incentives to providers to ensure that all individuals have access to effective public health and personal health care” (WHO 2000). Health financing systems have three key functions as follows: (1) *revenue collection*-mechanisms by which health systems receive funds from households, organizations/companies or donors; (2) *pooling*-accumulation and management of collected funds to ensure that the financial risk of seeking health care is shared by all members of a given pool; and (3) *purchasing*-the process through which the pooled monies are paid to providers in exchange of a set of health interventions (WHO 2000). Health financing systems thus play a critical role in determining the ability of a country’s domestic health system to not only provide health services to her people but also ensure maximum health gains are achieved through efficient use of the limited resources available. Many low- and middle-income countries, including those in Sub-Saharan Africa are home to a large share of the global disease burden and are struggling to improve the efficiency of their health financing systems as they strive to actualize the goals of Universal Health Coverage (UHC) (World Bank Group 2018). The goals of UHC include providing financial protection from costs of seeking health care and providing access to quality health care for all when in need. Kenya, a low middle income (Barasa, Maina & Ravishanka 2017) country with poor health outcomes, limited resources and poor progress to achieving UHC, has a similarly weak health financing system that is also faced by numerous challenges and inefficiencies in resource optimization (Luoma et al. 2010) that must be addressed prior to achieving UHC.

The 2010 World Health Report (WHO 2010) notes that one of the fundamental questions that countries striving for UHC need to address is how to encourage optimum use of available resources; this is even more so critical in low middle income nations such as Kenya with relatively fewer economic resources at their disposal. The 2010 World Health Report further notes that countries can significantly increase their efficiency and quality of care by shifting away from passive forms of purchasing to more active (strategic) forms (WHO 2010); highlighting the significance of the purchasing function within health financing systems.

Passive purchasing is where purchasers simply transfer resources to providers through mere financial reimbursements in response to bills received for services rendered, whilst strategic purchasing involves greater considerations of the following: *which* interventions to purchase, *how* to purchase them and from *whom* to purchase the interventions (WHO 2010). Strategic purchasing is said to occur when purchasers link resource allocation decisions to provider performance (Kutzin 2001) and is implemented through a range of tools including: regulation, contract negotiation, quality rating of health plans, performance incentives and consumer education (DuGoff, Weiner 2011). One of the main ways strategic purchasing mechanisms aid in increasing efficiency and improving care is by enabling purchasers to use their power to influence provider actions and behaviours (Kutzin 2001). Various conceptualizations of '*power*' exist within literature with the most relevant ones to this study being those that discuss power in terms of a relation between two parties. Dahl (1957) outlines that 'A has power over B to the extent that he can get B to do something B would otherwise not do'. Bachrach and Baratz (1970) add that power can also be a matter of A preventing B from doing what B wants to do. Power is a relational concept and is activated between two parties, the relationships between purchasers and providers in the process of implementing strategic purchasing mechanisms will thus give rise to opportunities to express power.

For purchasers and providers, some of the sources of power that they use to influence the actions of the other to their advantage or to promote/protect their interests and objectives include market power such as monopolies and monopsonies that enable either of the two to dictate prices or terms that are favourable to them (Pauly 1998). Other sources of power specific to purchasers include: use of their pooled financial resources to actively demand quality and efficiency from providers by linking resource allocation to performance or through creating financial incentives for improved quality (Kutzin 2001); use of innovative provider payment mechanisms and arrangements as sources of contractual power to shift some of the financial risk of providing care to providers (Kutzin 2001); and use of regulatory authority and legislature by government purchasers to dictate terms for providers (DuGoff, Weiner 2011) amongst others. Information asymmetry, a characteristic of the health care market is also a source of power which is frequently used by providers to promote their own interests (Kutzin 2001).

Public and private purchasers in Kenya have over the past few years implemented a range of strategic purchasing mechanisms in private provider facilities. Recognizing the pivotal role strategic purchasing has in ensuring optimal use of healthcare resources (WHO 2010) this study, through an *implementation* lens, will focus on the implementation of various strategic purchasing mechanisms as follows: (1) use of a capitation model by the National Hospital Insurance Fund (NHIF) to manage its outpatient health insurance plan and (2) implementation of select strategic purchasing mechanisms by private purchasers including intervening in clinical decision-making processes, hiring of staff with medical backgrounds, selective contracting of providers, use of preauthorization processes and use of step-down procedures (Munge et al., 2015, Deloitte, 2011).

Capitation involves a fixed payment per beneficiary to providers contracted by a healthcare purchaser to deliver a range of services to a given population which potentially offers great incentives for prevention and cost control

(WHO 2000). Capitation symbolizes a huge and significant shift in NHIF's purchasing strategy of moving from passive to strategic purchasing whilst the select strategic purchasing mechanisms for private purchasers were identified from existing literature outlining efforts by private purchasers to implement strategic purchasing in order to control costs and as quality assurance strategies (Munge et al., 2015, Deloitte, 2011). As strategic purchasing is relatively new in Kenya, the study seeks to understand purchaser and providers experiences during implementation and identify the influence of providers' and purchasers' sources of power, in relation to each other, on implementation outcomes – as power is a relational concept.

An implementation lens: Peters et al. (2013) broadly define implementation research as “ the scientific study of the processes used in the implementation of initiatives as well as the contextual factors that affect these processes” and recommend a list of implementation outcome variables that can be used when studying implementation. For this study we have selected two of these variables: *acceptability and adoption*. These are defined by Peters et al (2013) as follows: (1) *adoption*- the intentions, initial decisions, uptake, utilization and actions by actors to try use a new intervention; and (2) *acceptability*- the perception amongst actors regarding the agreeability, credibility and relative advantage of an intervention as well as their comfort with it. These implementation outcomes are likely to unravel hidden obstacles within the frequently bumpy interface between what can be achieved in theory and what occurs in practice (Peters et al. 2013). In addition, study of these outcome variables will also offer a better understanding of: the obstacles to/opportunities for scaling up of the interventions; how providers are disposed towards scaling up; what implementation strategies may be best suited to work over time; and the important influence of contextual factors (Peters et al. 2013) such as providers' and purchasers' sources of power influencing roll out of strategic purchasing mechanisms.

Findings from the study are hoped to contribute to the minimal knowledge on experiences of purchasers in

rolling out strategic purchasing mechanisms in Kenya.

2. BACKGROUND

2.1 Social and Economic Factors

Kenya is a low middle-income country (Barasa, Maina & Ravishanka 2017) situated in Eastern Africa with a population of about 43.18 Million people in 2012 (World Bank 2013) with an estimated annual increase of about one million people (World Bank 2012) and a GDP per capita of USD 993 in 2012 (KPMG 2013). Past recent economic growth has been sluggish compared to her regional counterparts with Kenya recording a GDP growth rate of about 4.3 percent. This is due to a myriad of external and internal factors inclusive of the economic aftershocks of the 2008 global economic crisis and Kenya's 2007/08 post-election violence (KPMG 2013). However, since 2008 Kenya has recorded an overall gradual economic recovery phase inclusive of a new and progressive constitutional dispensation in 2010 and most recently a peaceful election in early 2013 (KPMG 2013). This has not only put the country back on the challenging journey to achieving middle income status by year 2030, as per Kenya's economic blue print-Vision 2030 (Government of Kenya 2007), but also created a more positive outlook for both public and private sectors continued growth, as well as refocusing national efforts on improving important social services such as health.

2.2 Health Indicators in Kenya

Although the government's efforts to improve health outcomes for her people have yielded considerable gains over the past few decades, most health indicators in the country are however still poor by global standards with a life expectancy at birth of 60 years, an under-five mortality rate of 73 per 1000 live births and a maternal mortality ratio of 360 per 100,000 live births (WHO 2011). The leading causes of morbidity and mortality in the country are communicable, maternal, perinatal and nutritional conditions accounting for about 62 percent of all mortality in 2010 (WHO 2013). The country particularly suffers from a high HIV

burden although concerted efforts have lowered prevalence of HIV by about 40 percent from its peak in the early to mid-nineties to about 6.2 percent in 2010 and as well led to the achievement of a substantial ARV coverage rate of 83.1 percent amongst eligible adults (NACC, NASCOP 2012). However non-communicable diseases have gradually emerged as a serious concern for the country with an estimated combined contribution of about 28 percent of all deaths in 2011 with cardiovascular diseases and cancers accounting for 12 percent and 6 percent respectively (WHO 2013).

Kenya is hence faced with the formidable challenge of an emerging epidemic of non-communicable diseases on the backdrop of a heavy longstanding burden of HIV and other communicable diseases resulting in a huge strain on the public health sector.

2.3 Organization of the Health System in Kenya

2.31 Public Provider System

Kenya's health care system is a relatively developed one in the region with a combination of both a public health system and a growing robust private health system. The public health system is multi-tiered having several levels of facilities. From the lowest level upwards this includes: public health care programs, previously organized as community care programs -level 1; dispensaries -level 2; health centers and maternity/nursing homes-level 3; primary (district & sub-district) hospitals-level 4; secondary (provincial) hospitals -level 5; and two tertiary national teaching and referral hospitals-level 6 (Luoma et al. 2010). With the political and centralized governance structures currently transitioning to a devolved system, the tertiary and provincial hospitals are envisaged to serve as national and regional referral hospitals respectively under national government with the rest of the facilities under county management; these will be managed by the forty seven newly created counties whereby level 4 hospitals will act as county referral hospitals whereas the rest will mainly provide primary and community care services to their respective counties (Government

of Kenya 2011). The public health system serves the majority of the population in the country but has been faced by a myriad of challenges ranging from under funding, poor stewardship, shortage of qualified health personnel and inability to cope with the growing disease burden from a rapidly growing population who are relatively poor with a significant section of the population having to seek alternative care from the private sector (Luoma et al. 2010).

2.32 Private Provider System

The Kenyan private sector market is relatively large, fairly well developed and expanding whereby by absolute value of source of financing for Total Health Expenditure (THE) the private sector market size grew by 13 percent from KSh. 40.1 Billion to KSh. 45.1 Billion comparing the estimates of the 2005/06 National Health Accounts (NHA) with those of the 2009/10 NHA respectively (Government of Kenya 2010). Private providers geographical distribution varies widely with the majority of the large and well established enterprises comprising of: large hospitals, outpatient medical centres, nursing and maternity homes, major pharmacies and private laboratories, specialized diagnostic centres, as well as private specialist clinics, being mainly located in the cities and major towns in Kenya, whilst the other group comprising of smaller institutions: smaller clinics and hospitals; drug shops and practitioners such as: nurses, mid wives, clinical officers and pharmacists; being mainly found in the rural areas and smaller towns of the country practising in relatively smaller scale partnerships or sole proprietorships (Barnes 2010). Faith based institutions (of which majority are Christian) and Non-Governmental Organizations (NGO) owned facilities form the rest of the private facilities and serve quite a significant section of the population in both urban and rural areas (Barnes 2010).

That the private health sector is largely inaccessible to most of the low income populations in Kenya whom even when they gain access to private services mostly depend on Out-of-Pocket (OOP) expenditures is

undeniable and worrying but nonetheless the private sector continues to play an important role in the overall provision of healthcare services in the nation and arguably still has significant potential to increase access to preventive and curative health services to more Kenyans (Barnes 2010). Varied illustrations of this significance include: 36 percent of all women during KDHS 08/09 were found to have sought family planning and contraception services from a private health facility (Kenya National Bureau of Statistics 2010); children with symptoms of acute respiratory infections reported to be more likely to be taken to a private provider over a public one (Barnes 2010); and is indeed also utilized by the poor as well with 47 percent of the poorest quintile reported to preferring taking a child to a private facility when sick (Marek et al. 2005).

2.4 Health Care Purchasing

Purchasing is commonly described as the transfer of pooled resources to health service providers on behalf of the population for whom funds were pooled in exchange for health services (Kutzin 2001). Purchasing could either be passive or strategic whereby in the former purchasers simply act as financial intermediaries. This frequently leads to provider-led cost escalation as opposed to the latter whereby purchasers use their financial power to actively demand quality and efficiency from providers, or alternatively create incentives for efficiency and quality by linking resource allocation with performance (Kutzin 2001). Some of these strategic purchasing mechanisms include: creation of financial incentives for providers through various provider payment mechanisms such as capitation that normally shift some of the financial risks of providing care to providers; use of a primary care gate-keeper to manage referrals and utilization of various benefits

such as non-emergency speciality services; prequalification of primary care providers; contracting with only pre-selected providers; creation and use of monitoring and feedback loop systems on: treatment, referral and prescribing practices of providers; and various forms of quality assurance and utilization review including pre authorization for elective admissions and intervening in clinical decision making by purchasers to reduce inappropriate services (Kutzin 2001). The World Health Report 2010 makes a strong case for a shift from passive to strategic purchasing mechanisms stating that “passive purchasing leads to inefficiency” (WHO 2010). Various strategic purchasing methods have been used by high income as well as low- and middle-income countries (LMICs) to increase efficiency. Kazakhstan, Kyrgyzstan, Thailand and Turkey have used case-based payment in their hospitals for cost control and to increase efficiency (Burduja 2008, Kutzin et al. 2009, Langenbrunner, Cashin & O'Dougherty 2009, Ratanawijitrasin, Hirunrassamee 2009). In Finland, doctors are paid through a mix of salary, capitation and fee for service to improve efficiency (WHO 2010). Other countries such as Burundi, Cameroon, the Democratic Republic of Congo, and Rwanda through performance linked purchasing arrangements have reported improved performance and resource optimization in various aspects of care such as increase in number of antenatal visits, higher proportions of women delivering in a health facility and improved child immunization coverage (Eichler 2009, Basinga et al. 2010).

It is important to note that roll out of strategic purchasing is generally associated with various changes in provider-purchaser relations and dynamics such as: providers bearing more financial risk for providing care; providers being subject to more accountability; and attenuation of the effects of information asymmetries and market inefficiencies characteristic of the health care market that tend to favour providers over consumers and purchasers, amongst others (WHO 2000). Hence these mechanisms frequently face opposition and reduced cooperation from providers (WHO 2000) and expectedly more so when shifting from

passive to strategic purchasing. Both providers and purchasers will then resultantly use different sources of power available to them to ensure they safeguard their interests such as: taking advantage of information asymmetries; economies of scale; institutional regulatory authority; legislative power; and higher bargaining capacities to influence pricing and quality of services offered (WHO 2000).

This study cognisant of the significant potential adoption of strategic purchasing mechanisms has on improving performance of health financing systems (WHO 2000), describes two main such strategic purchasing mechanisms in Kenya as used by the NHIF and private purchasers. The study will also document various relevant sources of power as described earlier such as financial, institutional regulatory authority, contractual and provider payment arrangements. Through purchasers' perspectives and experiences, the study will explore how these sources of power for both purchasers and providers may influence roll out of strategic purchasing mechanisms as follows: (1) purchasers using their power to promote/enforce provider acceptance and adoption of the mechanisms and; (2) providers using their power to resist acceptance and adoption of the mechanisms.

2.5 Health Financing System in Kenya

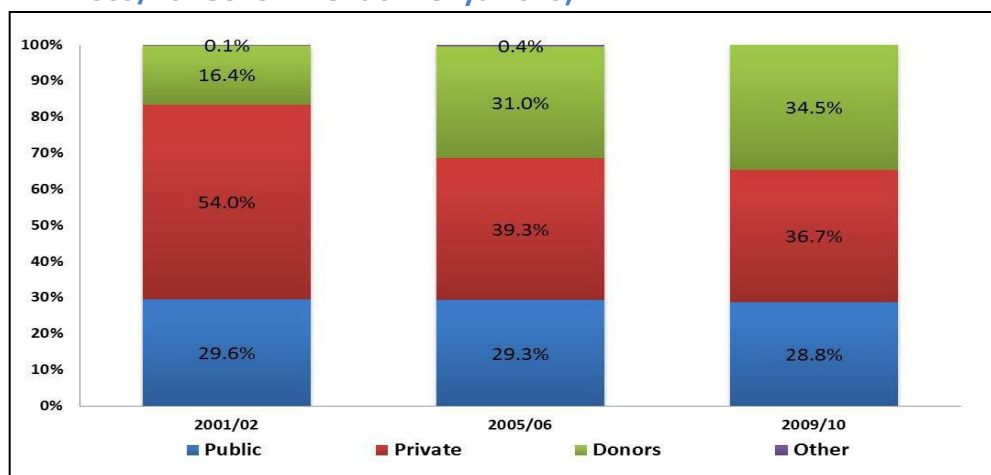
The health financing system in Kenya has multiple purchasers with one of the main challenges being longstanding low levels of funding. Total Health Expenditure (THE) as a percentage of GDP in 2011 was 4 % having remained fairly constant at this low level over the past few years averaging between 4 to 5 % since 2001 (WHO 2011). With the three key functions of a health financing system being revenue collection, pooling and purchasing, Kenya's health financing system can accordingly be briefly described as follows:

Revenue collection: the main sources of revenue can be classified as external (donors) and domestic (government and private) sources as shown in figure 1 below. Government collects revenues mainly through general tax and contributions for the mandatory prepayment scheme known as National Hospital Insurance

Scheme (NHIF). NHIF is compulsory to all formal workers in the private and public sectors who consequently form the bulk of contributors although there have been recent efforts to increase coverage to the informal sector through voluntary contributions (Deloitte 2011b). Non state pre-payment mechanisms include: voluntary private health insurance schemes which typically cover high income population segments of whom majority live in urban areas (Deloitte 2011a); Employer Self-Funded medical schemes commonly found as part of employee benefits; and Community Based Health Financing Schemes (CBHFS) largely targeting rural and low income populations (Deloitte 2011a).

Households bear a large burden of total health financing with Out-of Pocket (OOP) expenditures reported to have accounted for about a quarter of the 2009/10 THE (Government of Kenya 2010). OOP expenditure is the dominant form of paying for healthcare in the Kenyan private health care market occurring also in the public sector through cost sharing and user fees levied in public facilities (Deloitte 2011a). Most public facilities levying user fees have a few but weak exclusions mechanisms for the poor and vulnerable population segments such as waiver of fees for primary health services and for basic services to children aged five years and below (Luoma et al. 2010).

Figure 1: Breakdown of Total Health Expenditure by financing source: 2001/02, 2005/06, 2009/10 (source: NHA 2009/10- Government of Kenya 2010)



Pooling: Pooling is highly fragmented with limited cross subsidization mechanisms and low population coverage in the country. Despite being signatory to the Abuja declaration, the Kenyan government has in the past not made considerable efforts to the commitment of allocating 15 percent of its annual government budget to the health sector with past health sector allocations falling far much below this with a high of 8.6 percent in 2001/02 and gradually declining to 4.6 percent in 2009/10-whereby general government expenditure on health amounted to 28.8 percent of the 2009/10 THE (Government of Kenya 2010) equivalent to 2 percent of Kenya's GDP (WHO 2011). In addition to the general tax pool other pools include: the NHIF, which is the largest membership pool with an estimated coverage of 2.8 million principal members and 6.6 million total lives covered (17 percent of population); various private prepaid health insurance pools with an estimated 700,000 lives covered (1.8 percent of population); and Community Based Healthcare Financing Schemes with an estimated 470, 000 lives covered -1.2 percent of the population (Deloitte 2011a). NHIF and private insurance mechanisms are estimated to cover only 20 percent of the population with about 80 percent of the Kenyan population having no form of medical cover. The NHIF pool has the most diverse membership by income status by income status including upper, middle- and low-income earners as it is mandatory for all formal workers (Deloitte 2011b). It hence has the highest rate of risk cross subsidization compared to other existent pools in the country. In addition, NHIF has introduced two more pools recently; one for civil servants and disciplined forces (Omondi 2012); and the other for public school teachers (Karongo 2012), with both schemes having enhanced benefit packages.

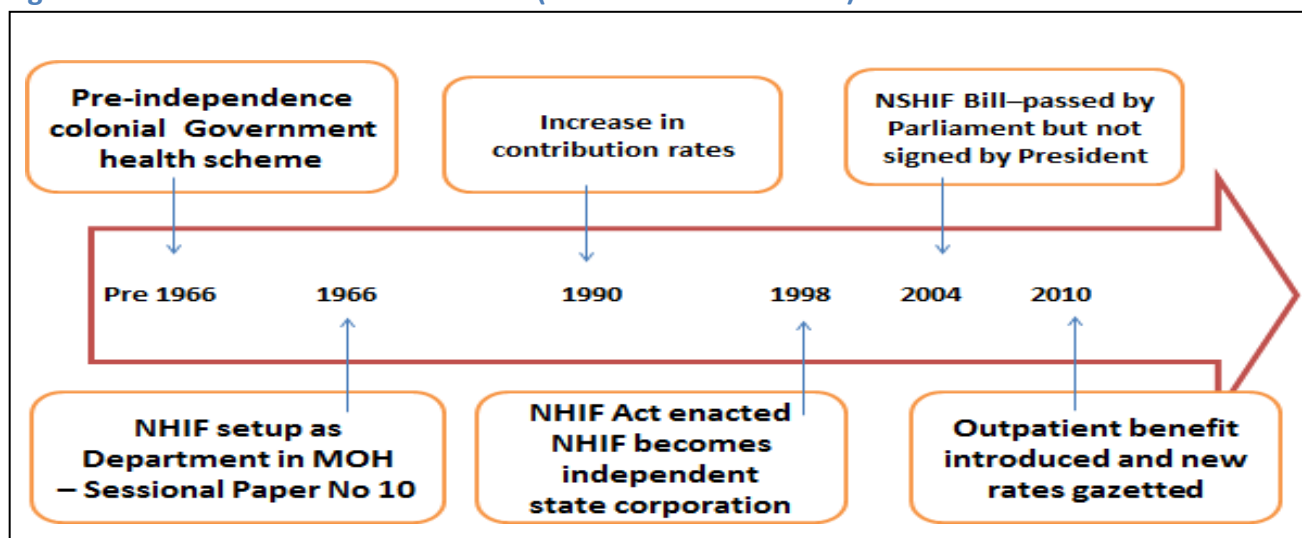
Private health insurance pools typically cover high income population segments that typically have relatively lower disease burdens with the pools characterized by high fragmentation and sub optimal risk pooling and cross subsidization mechanisms (Deloitte 2011a).

Purchasing: In Kenya, NHIF is the largest purchaser by membership size and purchases health services

through various mechanisms and from a wide range of public and private providers in the country. Prior to 2010 NHIF was offering only inpatient plans through a rebate system for bed charges. This study focusses on the capitation model for the enhanced out-patient covers for all NHIF beneficiaries at public and select private facilities introduced in 2010 (Deloitte 2011b).

NHIF has significantly evolved over the years since its establishment in 1966 as a department within the Ministry of Health to a semiautonomous body through the NHIF Act no 9 of 1998 with some of the key milestones highlighted in figure two below. Having been subject to great political control and manifesting poor accountability as characteristic of most government institutions in the 1980s and 1990s, NHIF has since then undergone significant restructuring and reforms in the wake of a political transformation that occurred in the early 2000s whereby some of the reforms it underwent from 2003 include: restructuring of its governance structures with formation of a more accountable board; roll out of deliberate initiatives to increase its: population coverage, branch network and adoption of innovative IT technologies; increased focus on transparency and accountability with a declaration of a 'zero tolerance to corruption' policy; and optimization of its workforce amongst others (Deloitte 2011b). Its reform processes and efforts to expand its mandate and population coverage have nonetheless been faced with multiple hurdles marked by controversies arising from influences of divergent political and stakeholder interests. This has resulted in multiple setbacks during attempts to roll out new coverage plans and contribution rates following various allegations from public bodies and other stakeholders such as: fund mismanagement, corruption and lack of sufficient stakeholder consultation resulting in several on-going court proceedings (Deloitte 2011b).

Figure 2: Overview of evolution of NHIF (Source: Deloitte 2011b)



However some of the notable advances NHIF has made include: roll out of new purchasing mechanisms signifying a realization of the need to shift from the previous fee-for-service only provider payment mechanisms to use of more innovative provider payment mechanisms such as capitation; introduction of varying outpatient benefits in addition to the previous inpatient-only covers; a gradual increase in the number and diversity of facilities within its provider network; improved claims processing and payment durations; improved quality assurance processes through rollout of the Kenya Quality Model (KQM) standards as well as training providers on KQM; and representation on hospitals' quality committees (Deloitte 2011b).

As the anticipated lead government agency for the roll out of an envisioned national social insurance scheme, NHIF however still has quite some significant institutional reforms pending in order to effectively play this role (Deloitte 2011b) including further improvements on its purchasing functions. This study will seek to understand and explore roll out experiences of one of its new strategic purchasing mechanisms; use of a capitation model for purchasing outpatient healthcare services from private providers. The study, from the perspectives of key NHIF staff also seeks to understand how different sources of power are used by NHIF

and private providers to influence provider adoption and acceptance of this new model.

Private purchasers in Kenya are multiple, diverse and can be grouped as follows: underwriters (insurance firms)- including those offering health micro-insurance products; Medical Insurance Providers (MIPs)- the equivalent of managed care organizations; Community Based Health Financing Schemes; and Employer in-house Schemes, as shown in Table 1 below (Deloitte 2011a). Private purchasers cover only about 2 percent of the total population (majority of who live in the cities and major towns) in Kenya and are largely out of reach for most citizens primarily due to unaffordability (Deloitte 2011b). Benefit packages of private purchasers are normally predetermined in advance and are largely influenced by consumers' affordability with most purchasers having a preference for provision of inpatient and group covers as these are perceived to be more predictable and less risky compared to outpatient and individual covers (Deloitte 2011a). In addition, although most of the common conditions in Kenya are covered, there still exists varying restrictions in most benefit packages such as varying exclusions for chronic and pre-existing conditions; inclusion of co-payments; and in some cases, restriction to mission and government hospitals (Deloitte 2011a). Several factors have been attributed to contributing to the unaffordability of voluntary private health insurance in the country such as private providers being accused of unilaterally and repeatedly increasing prices of health services leading to surging medical inflation rates and resultant medical premium increases (Deloitte 2011b).

The predominance of passive purchasing mechanisms amongst purchasers is also another factor contributing to high medical costs. This is exacerbated by a lack of adequate expertise amongst private purchasers to roll out and implement novel strategic purchasing mechanisms (Deloitte 2011a). Some of the major private providers also enjoy significant market power hence provider monopoly whereby a relatively small section of providers yields considerable power compared to private purchasers (Deloitte 2011a). These factors combined have also led to private purchasers having weakened bargaining power in relation to

providers as well as overall high inefficiency and surging costs of care in the sector (Deloitte 2011a).

This paper also seeks to describe efforts by two of the main private purchasers in the country to employ strategic purchasing mechanisms in the running of their in-patient plans and in specific, intervening in clinical decision-making processes. In addition, the paper also seeks to describe the various sources of power for private providers and private purchasers and through a purchaser's perspective also explore their application as follows: by private purchasers to influence/promote acceptability and adoption of strategic purchasing amongst private providers; and by private providers to resist or modify their acceptance and adoption of these mechanisms.

Table 1: Overview of the main Prepaid Schemes in Kenya and their coverage. (Source: Deloitte 2011a)

Type of prepaid scheme	Number providing health Insurance	Set Up Under	Estimated number of persons covered
NHIF (Public Social health insurance, mandatory in formal sector)	1	NHIF act 1998 Oversight by MOMS	2.8 principal members 6.6 million total lives Covered
Private health insurance by insurance companies (Including health micro insurance)	16 Insurers (out of 44)	Insurance act Cap 487 Regulated by IRA under ministry of Finance	Covers 700,000 lives and some also have NHIF, especially those
Private health insurance by MIPs	30 licensed (most are insurance intermediaries) 6 Offer medical insurance Products	Insurance Act Cap. 487 Regulated by IRA	under employer groups as NHIF is mandatory
Community based healthcare financing schemes	30 (2006, Ten operational). 9 organisations members of KCBHFA	Ministry of Gender and Youth & Registrar of Societies Registered as societies, welfare groups or cultural organisations	Approximately 470,000 Lives
Employer in-house Schemes	Several large and small schemes exist. Not documented	N/A	Not documented

The second group of private purchasers comprises of CBHIFs which are mostly found in rural areas of Kenya with an estimated total coverage of about 470,000 lives; although most offer comprehensive inpatient cover at their contracted facilities, they have had a limited overall impact on the population with a 2006 survey identifying 30 CBHIFs in Kenya but with only 10 operational (Deloitte 2011a). Employer in-house managed schemes are also significant contributors to health financing whereby employers accounted for 3.3 percent of the 2005/06 THE with most schemes being found in the agricultural, parastatal, banking, energy and mining sectors; however further in-depth documentation on them still limited (Deloitte 2011a).

3. PROBLEM STATEMENT AND RATIONALE

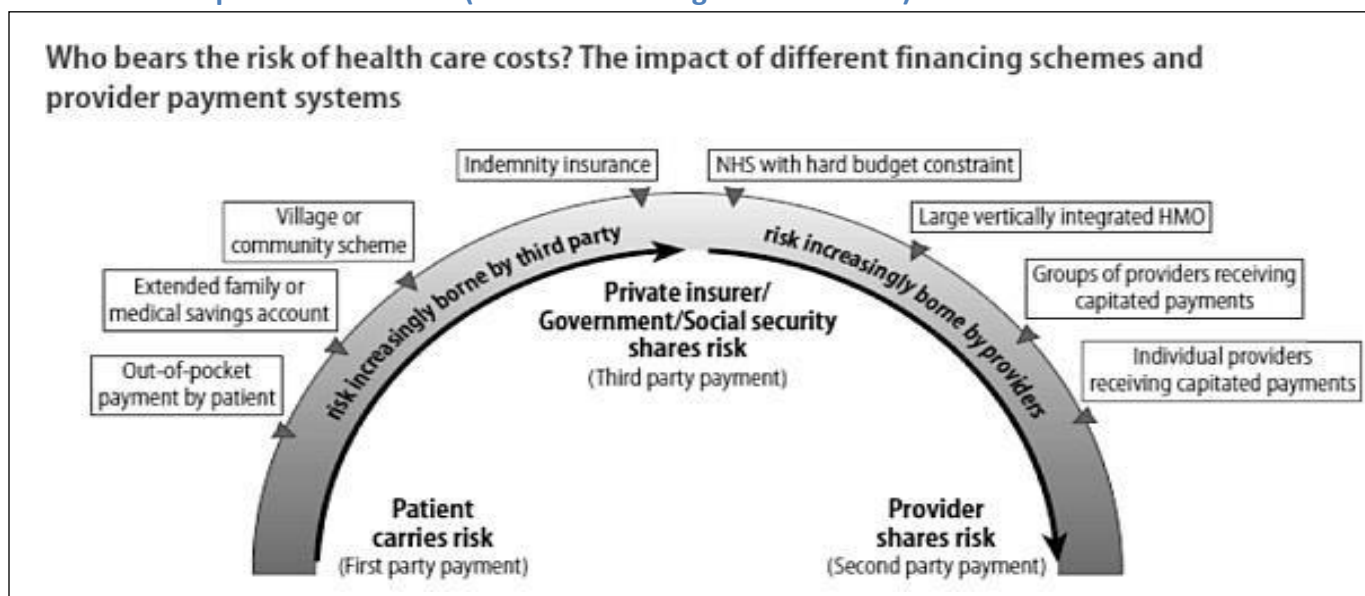
For Kenya to make significant progress towards UHC, optimization of resource use is critical with roll out of strategic purchasing mechanisms and scale up of existent ones bound to aid in improving efficiency. For example, as fee-for-service is the most dominant provider payment mechanism in the country, purchasers largely end up playing a passive role (Munge et al., 2015). This leads to various unfavourable effects on purchasers as follows: limited opportunities to negotiate on prices and costs in advance; increased vulnerability to supplier induced demand and provider over servicing; and private purchasers in particular having to grapple with high administrative expenses (Deloitte 2011a). Faced by these challenges amongst others, purchasers in Kenya have made efforts to use various strategic purchasing mechanisms to overcome the challenges such as (1) NHIF's use of a capitation model for its out-patient cover and (2) private purchasers' implementation of various select strategic purchasing mechanisms. Implementation outcomes of such efforts are to a significant extent influenced by how purchasers and providers are able to use their respective sources of power to either promote/enforce or to resist/modify provider adoption of strategic purchasing mechanisms (Deloitte 2011b, Deloitte 2011a, Kutzin, Cashin & Jakab 2010) when in a purchaser provider relationship. This study hence aims to: describe the strategic purchasing mechanisms outlined

earlier; investigate the various relevant sources of power for these actors as described earlier; and explore how purchasers and providers use their power to influence provider acceptability and adoption of these interventions. Research findings are hoped to contribute to the understanding of some of the on-going strategic purchasing mechanisms in the Kenyan context as well as the challenges facing their acceptability and adoption by providers.

4. CONCEPTUAL FRAMEWORK

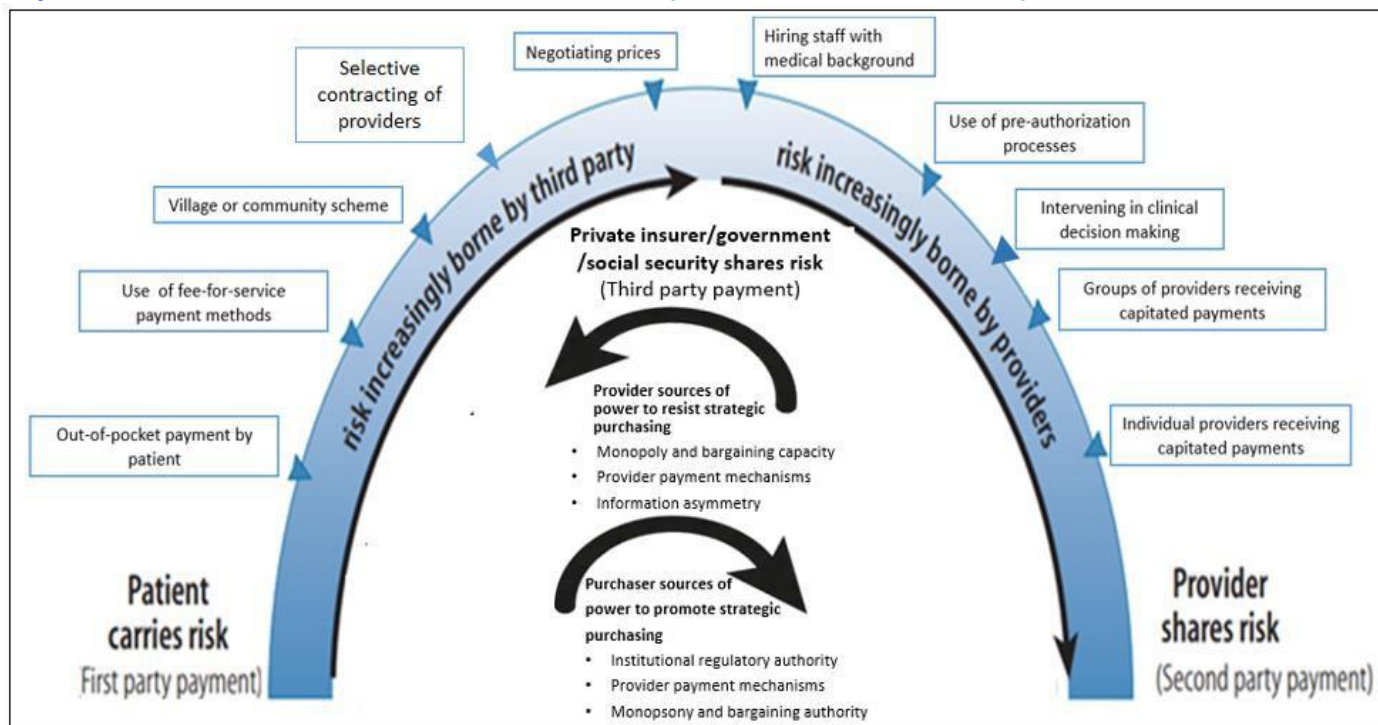
Use of conceptual frameworks and theory is integral to health policy and systems research. As outlined by Gilson (2012) theory can be used in clarifying and explaining complex phenomena within their context and offer basis for generating hypothesis and conceptual frameworks. The framework used in this study is a modified version of one shown by WHO (1999) (figure 3) to describe how various forms of strategic purchasing mechanisms and provider payment methods distribute financial risks of providing care from purchasers to providers.

Figure 3: Various strategic purchasing mechanism and provider payment methods and how they transfer financial risk to providers. Source: (World Health Organization 1999)



The various empirical and theoretical literatures described earlier on healthcare purchasing, provider payment methods (WHO 2000, Kutzin 2001), as well as on sources of power for providers and purchasers (Lagarde et al. 2010, Mathauer et al. 2017, McKee and Brand 2005, Pauly 1998, 2001, WHO 2000, WHO, 2010) and implementation research (David et al. 2013) have been used to create the modified conceptual framework (figure 4) used in the study. Based on the hypothesis that providers will naturally resist strategic purchasing mechanisms subjecting them to higher accountability as well as to bearing higher financial risks of providing care (WHO 2000, Kutzin 2001), the above framework is then modified to reflect the anticipated use of different sources of power by purchasers and providers to influence adoption and acceptability of specified strategic purchasing mechanisms in the country (see figure 4 below).

Figure 4: Conceptual framework showing various strategic purchasing mechanisms, provider and purchaser sources of power and their influence on the interventions (Modified from WHO 1999)



This modified framework illustrates implementation of additional strategic purchasing mechanisms including the use of contracts to selectively accredit providers, intervening in clinical decision-making processes, negotiating prices of care with providers, use of preauthorization processes, hiring staff with medical knowledge and use of step-down procedures. Shifts from passive to strategic purchasing mechanisms are illustrated as a transition from the left to the right side of the diagram whereby the risk of providing care gradually shifts towards providers. As purchasers implement these mechanisms, providers will naturally tend to resist them due to the increased financial risk transfer and need for their accountability (WHO 2000, Kutzin 2001). Purchasers will on the other hand use their various sources of power to promote provider adoption and acceptance of these mechanisms.

5. RESEARCH AIMS

The study is aimed at documenting the role of power between two parties in influencing the implementation of strategic purchasing in Kenya. The study describes early implementation of capitation models by the National Health Insurance Fund (NHIF) for out-patient coverage, and efforts to implement various select strategic purchasing mechanisms by private purchasers. The study also aims to explore and analyse various sources of power for purchasers and private providers in Kenya and the influence of use power by either party on private provider acceptance and adoption of strategic purchasing mechanisms.

6. RESEARCH QUESTION

How are select strategic purchasing mechanisms implemented in Kenya and what role do the various sources of power for purchasers and private providers have in influencing acceptance and adoption of strategic purchasing mechanisms by providers?

7. RESEARCH OBJECTIVES

- I. To describe early implementation (specifically acceptability and adoption by private providers) of strategic purchasing mechanisms in Kenya as below:
 - a. NHIF's capitation model for its outpatient plans
 - b. Select mechanisms implemented by private purchasers in Kenya including use of contracts to selectively accredit providers, intervening in clinical decision-making processes, negotiating prices of care with providers, use of preauthorization processes, hiring staff with medical knowledge and use of step-down procedures.
 - c. To identify whether sources of power for purchasers and private providers play a role in implementation outcomes. Sources of power include (1) Market power such as pooled financial resources, monopoly/monopsony amongst others (2) Institutional regulatory authority (3) Provider payment mechanisms such as capitation for purchasers and FFS for providers (4) Information asymmetry and technical expertise (5) Any other significant source of power that may arise
- II. To explore the influence of various sources of power for private providers and purchasers on provider acceptance and adoption of strategic purchasing mechanisms as follows:
 - a. How purchasers use their power to promote or enforce acceptance and adoption of strategic purchasing mechanisms in their relationship with private providers
 - b. How private providers in their relationship with purchasers use their power to resist or modify their acceptance and adoption of strategic purchasing mechanisms

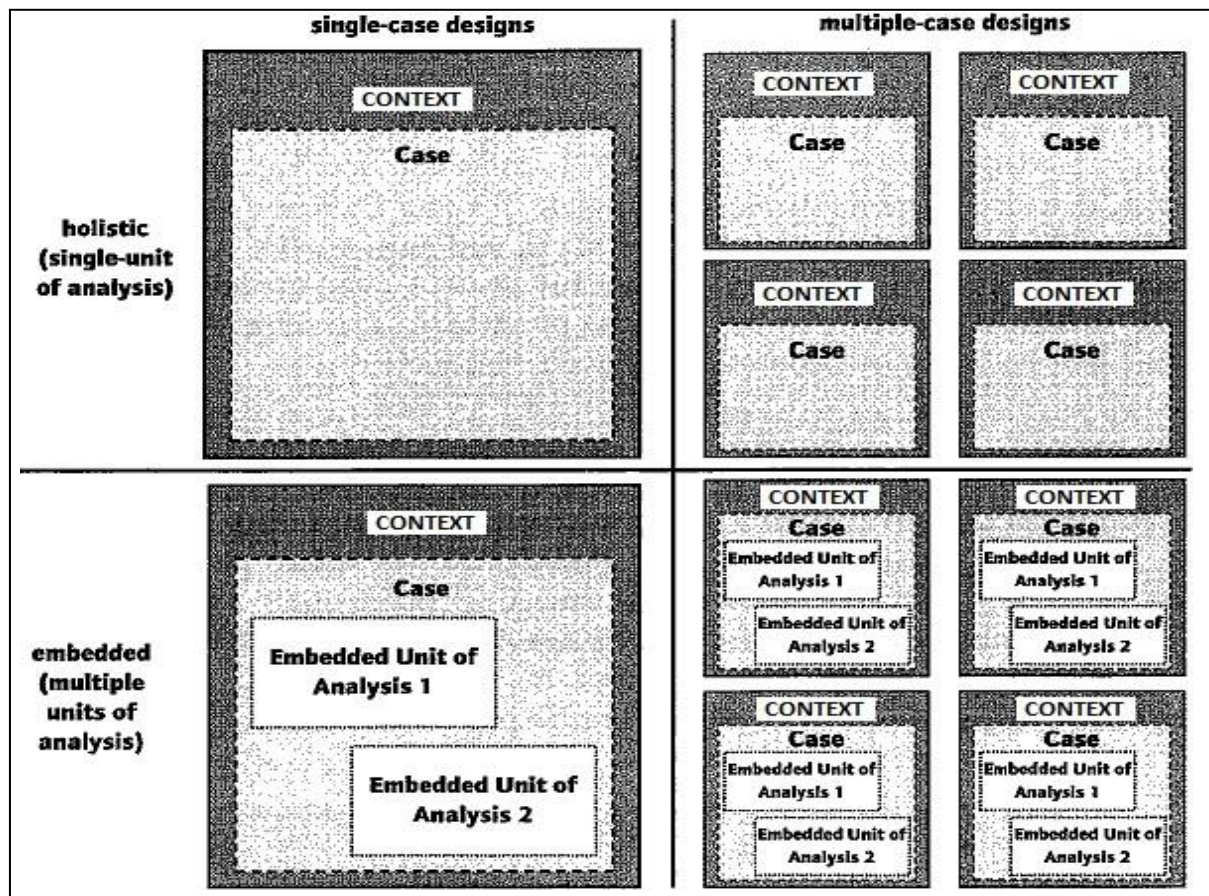
8. METHODOLOGY

8.1 Study Design

The study employs a multiple case study design. A case study is an ‘empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’ (Yin 2009). Case study methods are particularly useful in social sciences in the following ways: aiding researchers answer ‘*why*’ and ‘*how*’ research questions; understanding complex phenomena that do not require control of behavioural events of respondents; and in studies focussing on contemporary events (Yin 2009). The study will have an *exploratory* case study component that will help ‘develop propositions for further inquiry’ (Yin 2009) such as ‘*what are the market forces that give rise to power in healthcare?*’ The study also has an *explanatory* case study component that asks ‘*how*’ questions in a bid to draw linkages between various phenomena (Yin 2009) such as ‘*how do private providers and purchasers use their different sources of power to influence implementation outcomes of strategic purchasing mechanisms?*’.

A multiple-case design composed of multiple units of study (cases) each with comparatively different contexts (see figure 4 below) as described by Yin (2009) is used whereby implementation of capitation by the NHIF amongst private provider facilities will form the first case whilst implementation of select strategic purchasing mechanisms by private purchasers amongst private provider facilities comprises the second case. Although there are overlaps between the contexts of NHIF and private purchasers there are significant differences such as: use of different strategic purchasing mechanisms such as capitation versus intervening in in-patient decision making processes with both having different approaches; significant variance in composition of provider panel with NHIF’s capitation model involving numerous out-patient facilities whilst private providers largely having smaller range of in-patient facilities; and use of different sources of power amongst others; hence the choice of a multiple-case study design.

Figure 5: Basic Types of Designs for Case Studies (Source Yin 2009)



The study will explore various sources of power for purchasers and private providers and their influence on provider acceptability and adoption of the strategic purchasing mechanisms from a purchaser's perspective. This will be done through conducting in-depth interviews with several select key informants drawn from the NHIF, select private purchasers and in addition a few other relevant stakeholders in Kenya as described further below. In-depth interviewing is a qualitative research technique comprising of intensive individual interviews (Neale & Boyce 2006) that enables researchers explore feelings and perspectives of respondents on a subject (Guion, Diehl & McDonald 2001). The use of documents comprising of contracts between providers and purchasers, newspaper articles and grey literature will also be used to supplement the findings from the interviews. Bowen (2009) and Yin (2009) note that documentation in case study as a source of evidence is important in corroborating and augmenting interview data by serving as a form of triangulation.

8.2 Study Population and Sampling

The study population we seek to interview includes people within purchaser organizations in the country from both the public and private sectors who have engaged in implementation, we will try and reach out to private providers as well as health experts but primarily we are looking at the relationship from the purchaser perspective. Respondents from within these institutions will also be recruited through a purposive sampling strategy. Purposive selection of cases in case study research enables prior theory and initial assumptions to be tested (Gilson 2012). Further, purposive sampling in case study and qualitative research allows inclusion of as many possible factors that may influence behaviours of respondents central to a study focus enabling gathering of views from a wide range of perspectives (Gilson 2012). Through this sampling strategy it will be possible to deliberately recruit respondents working in different roles and interacting with providers at varying organizational levels as explained further below.

The NHIF is selected in the first case as it is the national health purchaser in the country. For Private purchasers, the following inclusion criteria will apply: (1) a registered private insurance firm or a firm registered as a private medical insurance company offering inpatient medical insurance as one of its products; (2) a health purchaser who can be deemed to be a major player in the sector by being amongst the top four health purchasers by market share; and (3) a health purchaser that carries considerable financial risk in offering health insurance plans as it is this risk that compels purchasers to employ strategic purchasing mechanisms and hence transferring some of the financial risks of meeting patient's medical needs to providers (Kutzin 2001). Institutions having both payer and provider arms (also known as HMOs), third party administrators, CBHIS and employer self-funded schemes are thus excluded to narrow focus on purchasers who bear significant financial risk.

Private sector providers will be defined to include formal private sector players as follows; (1) Clinics: General

Practitioners, and Specialists; (2) Hospitals; (3) Medical Centers; and (4) Nursing Homes.

8.2.1 Selection of participants within purchasing organizations

Participants will be selected from the Purchasers of interest to this study. From each purchaser organization two to three participants will be interviewed. Sampling will be done purposively to include respondents working at varying organizational levels and with different roles and responsibilities in regard to the strategic purchasing mechanism for each institution. Senior management staff targeted includes those heading medical insurance business and managers overseeing provider relations or purchasing operations and will be identified for each purchaser institution and requested for interview. Through these staff more respondents will be identified to trace staff working directly with providers or actively implementing the strategic purchasing mechanisms as per each purchaser organization. For example, for NHIF this may include staff in charge of recruitment and monitoring of providers under the capitation model whilst for private purchasers this may include medical personnel employed to engage with providers as a way of intervening in medical decision-making processes.

About 6 to 8 interviews with respondents from public and private purchasers and 1-2 interviews with other relevant stakeholders are anticipated to be carried out as shown in table 2 below. Other key informants that may be contacted to provide an outsider perspective as well as enrich insight may include resource persons drawn from private provider organizations and health sector experts. We would be particularly keen to understand implementation from the private provider perspective.

8.3 Data Collection and Management

In-depth interview methods will be used as the main data collection method by administering an interview guide (see appendix one and two) to the selected participants. In-depth interviewing is a qualitative research technique comprising of intensive individual interviews (Boyce, Neale 2006) whereby an open-ended, discovery-oriented method is used allowing interviewers to deeply explore the feelings and perspectives of respondents on a subject (Guion, Diehl & McDonald 2011). In-depth interviewing is also most appropriate for situations when one wants to derive detailed information from a relatively small number of participants (Boyce, Neale 2006) as is the case in this study.

All interviews will be conducted by the principal researcher and will be recorded and transcribed into DVD format thereafter. The transcripts will be stored in the form of password protected Microsoft Word files saved in the researcher's laptop computer accessible to the researcher only. Hard copies of interview scripts will be stored securely under lock and key. A second source of evidence will comprise documentation such as policy briefs, institutional records, reports, newspapers, websites and other relevant documents. Documentation in case study as a source of evidence is important in corroborating and augmenting interview data by serving as a form of triangulation (Yin 2009).

As outlined by Yin (2009) on case study research methods, a case study database will also be created and will include the following four components: (1) *case study notes* from the investigator's own notes from interviews, observations or document analysis; (2) *case study documents*-materials collected during the study of which an annotated bibliography will be made where necessary; (3) *tabular materials* either collected during the study or created by the researcher; and (4) *narratives* produced by the investigator from the interviews.

Table 2: Overview of the main eligible private purchaser institutions for study (Source Deloitte 2011a, Deloitte 2011b)

Purchaser		Comments	Interviewee Selection
Public Social health insurance, mandatory and voluntary Contributors	NHIF	Inpatient and outpatient services with the largest pool of beneficiaries country wide	Purposeful sampling of 2 or more select Key interviewees Use of snowballing techniques where needed
Private Purchasers, Voluntary contributors	Jubilee	Highest Market Share total by gross annual premiums, Inpatient and outpatient plans for groups and Individuals	Purposeful sampling of 2 or more select Key interviewees per purchaser Use of snowballing techniques where needed
	APA	2 nd by market share, Inpatient and outpatient plans for groups and Individuals	
	UAP	3 rd by market Share, Inpatient and outpatient plan for groups and individuals	
	CIC	Has the largest pool for low cost products -30,000 lives	
	Heritage	Inpatient and outpatient plan for groups and individuals	<i>Excluded from sampling frame due to either low market share or lack of significant financial risk bearing</i>
	Britak	Market share, Inpatient plans for groups	
	Resolution	Inpatient and outpatient plan for groups and individuals, previously HMO	
	AAR	Inpatient and outpatient plan for groups and individuals, previously HMO	
	Pacis,	Catholic church founded, Inpatient products group plans, profitable	

8.4 Data Analysis

In addition to the interviews the researcher will also capture field notes during the entire study to increase research rigor. The field notes will provide additional data for analysis.

Each case will be analyzed separately using thematic content analysis that will involve familiarization with the data, and identification of codes and themes through the deductive application of the conceptual framework while staying open to inductive themes; (Green & Thorogood 2018). This will also involve

organizing data horizontally by codes, putting similar data together to build categories and finally looking at further relationship from the codes (Green & Thorogood 2018).

Document analysis will be used to supplement the data and a similar process of based on the same themes used in analysis of the interview scripts will be followed. It will also involve carefully reading and re-reading of the data to identify patterns in the data (Bowen, 2009). Two distinct case reports will then be generated. Cross case analysis techniques will then be used to analyse the two cases through comparative analysis that will involve comparing and merging pertinent themes from the cases (Creswell, 2007, Stake, 2013).

Various means of ensuring rigor and trustworthiness (Gilson 2012) that will be employed triangulation of data with field notes, triangulation within and across cases, and triangulation externally such as using relevant documentation.

9. ETHICS

Ethics approval will be sought through the established ethics approval system as prescribed by the University of Cape Town which will also entail informed consent and confidentiality. The study will also be sensitive to any conflict of interests and business risks that may be raised by any of the respondents. Other measures that will be applied include: (1) informing the participants in writing of the voluntary nature of participation, right to withdraw anytime and right to decline to divulge any personal or institutional information they may be unwilling to share; (2) informing in writing and elucidating the research objectives and data collection methods to participants; (3) providing an informed consent form to all participants and meeting and safeguarding all of their privacy needs ; and (4) providing written transcriptions of the data and ensuring all confidentiality needs of participants are met and safeguarded

10. STAKE HOLDERS REPORTING

A copy of the thesis report and findings will be publicly availed to all the participants and stakeholders as soon as possibly feasible.

11. LIMITATIONS

Limiting the scope to few select private purchasers and thus not covering the full extent of private purchasers may limit generalizations. Focus on only private health providers and leaving out the public sector which accounts for the bulk of NHIF's health care provision may also lead to narrowed breadth on NHIF's work in purchasing. Further, full access and thorough study of all relevant documentation evidence may not be possible due to confidentiality and business risks concerns by private purchasers as well as possible caution by NHIF respondents on issues regarding capitation that are currently under investigations or related to ongoing court processes. As this is a typically small-scale project characteristic of a stand-alone individual master's mini dissertation project and in addition without external funding support, a wider scope and long standing field engagement is also not feasible.

12. LOGISTICS

Anticipated timelines and milestones for the study are as shown in Table 3

below;

Table 3: Anticipated timelines and milestones for the study

	Activity	Timelines
1	Identifying and refining research topic	July, August 2013
2	Identifying supervisors and bringing partners on board –SHOPs,	August 2013
3	Protocol write up, revision and approval	September 2013

4	Refinement of instruments and study design/proposal Contacting selected respondents	October 2013 to October 2015
5	Data collection	October 2015 to February 2017
6	Data Analysis	Jan 2016 to March 2017
7	Thesis write up and Submission	March 2017 to Feb 2018
8	Dissemination of findings	July 2014 onwards

13. BUDGET

A summary of the planned budget is as shown in table 4 below. This is self-funded by the researcher.

Planning, permissions and mapping costs will involve costs incurred both in Cape Town and Nairobi during development of research proposal and tools, identification and contacting of various respondents as well as setting up interviews and seeking relevant authorizations. Data collection costs involve costs of a junior researcher (undergraduate student) to aid in recording of interviews as well as transcription of recorded interviews. The principal investigator will then go through all the transcripts and audio records to ensure accuracy of the transcripts. Other costs involved also include acquisition of a tape recorder and printing and stationary costs.

Table 4: Summary of the planned project budget

RESEARCH STAGES	ITEMS	QUANTITY	UNIT COST (ZAR)	TOTAL COST (ZAR)
Planning, permissions and mapping; Developing and testing questionnaire	Transport and logistics costs	10	R 100	R 1,000
Data collection and management Dissemination and reporting	Junior Researchers' fee per day & transcription costs	10	R 200	R 2,000
	Printing and stationary	500	R 1	R 500
	Recording Equipment	1	R 500	R 500
TOTAL				R 4,000
	Administration & Contingency	10%		R 400
TOTAL COSTS				R 4,400

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15. APPENDICES

15.1 APPENDIX 1: Research Questionnaire - NHIF

1. How long have you worked in health financing and health insurance in the country?
2. How long have you worked at NHIF and what is your current role at NHIF as regards to health care financing?
3. Are you involved in the roll out of the new capitation model? Could you describe your involvement so far
4. Please describe the capitation model as applied by NHIF to implement its outpatient scheme?
5. How was the model rolled out amongst the private providers? (Was there any consultation, price and rates negotiation, prior agreement on provider selection and contracting terms etc.?)
6. What were the initial reactions from providers to the way the capitation model was rolled out? Are there any experiences from initial engagements such as first meetings, feedback from providers?
7. Were there any elements of the roll out they were disagreeable on? Please explain.
8. How did private providers express any such disagreement?
9. Did NHIF have any power to enforce/promote their terms and protect its interests in cases where providers were not fully agreeable?
10. Please explain in detail sources of such power and how they were used by NHIF
11. Did private providers have any powers to resist NHIF capitation terms and promote their interests regarding any aspects they were not agreeable with?
12. Please explain in detail sources of such power and how they were used by private providers to modify or resist aspects of the capitation model that they were not fully agreeable with?
13. Could you describe the main successes of the roll out this far?
14. Could you describe the main challenges of the roll out so far?
15. What do you think will happen in the future? Why do you think this?

16. Is there anything else you think I may have missed that is relevant to our discussion that you'd like to add?

THANK YOU FOR YOUR TIME!!!

15.2 APPENDIX 2: Research Questionnaire - PRIVATE PURCHASERS

- 1) How long have you worked in health financing and health insurance in the country?
- 2) What is your current/main role at this institution as regards to health insurance?
- 3) Does your institution intervene in clinical decision making processes in the management of inpatient medical schemes? If so please list the various methods used and your involvement.
- 4) Please describe each of the interventions above in detail. Explain how and when they were rolled out.
- 5) What are the objectives of each of the methods and how successful have they been in achieving them?
- 6) What were the initial reactions from providers to the use of these interventions? Are there any experiences from initial engagements such as first meetings, feedback from providers?
- 7) Were there any elements of these interventions that providers were disagreeable on? Please explain.
- 8) How did private providers express any such disagreement?
- 9) Did your firm have any power to enforce/promote these interventions protect your interests in cases where providers were not fully agreeable?
- 10) Please explain in detail sources of such power and how you used them
- 11) Did private providers have any power to resist full implementation of the interventions or that prevented the interventions achieving their full objectives?
- 12) Please explain in detail sources of such power and how they were used by private providers to protect their interests or modify/resist aspects of the interventions that they were not fully agreeable with?
- 13) Could you describe the main successes of the interventions so far?
- 14) Could you describe the main challenges of the roll out so far?
- 15) What do you think will happen in the future? Why do you think this?
- 16) Is there anything else you think I may have missed that is relevant to our discussion that you'd like to add?

THANK YOU FOR YOUR TIME!!!

15.3 APPENDIX 3: Informed Consent Form-NHIF

This informed consent form is for respondents working with the National Hospital Insurance Fund (NHIF) in Kenya who are to take part in a study as detailed below involving in-depth interviews describing the capitation model as used by NHIF in purchase of outpatient health services from private providers in Kenya. The study is for the purposes of fulfilment of requirements for an MPH dissertation at University of Cape Town as described below.

Name of Principal Investigator:	Dr. Benson Chuma
Organization:	Graduate Student, School of Public Health, University of Cape Town, S. Africa
Project Title	Active Purchasing Mechanisms of Private Healthcare Services: Experiences
of Public and Private Purchasers in Kenya	

This Informed Consent Form has two parts:

- I. Information Sheet (to share information about the study with you)
- II. Certificate of Consent (for signatures if you choose to participate)

Respondents will be given a copy of the full Informed Consent Form

PART I: INFORMATION SHEET

My name is Dr. Benson Chuma and I am currently conducting a study as part of my Master of Public Health graduate program at the School of Public Health-University of Cape Town, South Africa.

You do not have to decide today whether or not you will participate in the study. Before you decide, you can talk to anyone you feel comfortable with about the study.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me

Purpose of the research

The aim of the study is to seek ways of improving health financing in Kenya by understanding the current active purchasing mechanisms in the country and how they could be improved on. I intend to describe active purchasing mechanisms in the country as follows:

- **NHIF: use of capitation in its outpatient medical scheme**
- **Private Insurers: use of select strategic purchasing mechanisms to purchase services amongst private providers**

This questionnaire is in regard to NHIF as listed above and in addition I will also seek to understand existing power differences such as financial, economies of scale, monopolies and bargaining capacities amongst others between NHIF and private providers and how they influence outcomes of such activities.

Findings of the research are aimed at providing insight on how such power differences between providers and purchasers shape active purchasing mechanisms with the hope that this knowledge can be used to influence policies favorable to roll out and expansion of active purchasing mechanisms

Participant Selection

You are being invited to take part in this research because we feel that your experience working with the NHIF will provide the relevant knowledge and insight that we seek

Procedures

We are asking you to help us learn more about purchasing of health services from the private sector as above. If you accept, you will be asked to take part in an in-depth interview with the principal investigator which will last about one hour. The questions will entail describing how NHIF rolled out the capitation model for its outpatient health plan. The discussion will also involve description of various sources of power (such as economies of scale, regulatory, monopoly/monopsony and bargaining capacities amongst others) between private providers and NHIF and their influence on the outcomes of the efforts described above.

WE WILL NOT ASK YOU TO SHARE ANY CONFIDENTIAL, PERSONAL OR INSTITUTIONAL KNOWLEDGE THAT YOU ARE NOT COMFORTABLE SHARING.

The discussion will take place in a mutually agreed location, and will involve the respondent and the principal investigator. The entire discussion will be tape-recorded, but no respondent will be identified by name on the tape. Also no comment or information from the interview will be ascribed to any respondent in particular. The tape will be kept securely under custodianship of the principal investigator and later on at the University of Cape Town. The information recorded is confidential and no one else except the research team will have access to the tapes. The tapes will be destroyed after about 6 months

Benefits

The study is aimed at contributing to the body of knowledge that supports an improved policy environment for purchasers to roll out and expand on active purchasing mechanisms. You will also personally receive a detailed report of the findings and policy recommendations prior to public dissemination or publication
You will not be provided any monetary incentive to take part in the research.

Confidentiality

We will not be sharing any information about the respondents with anyone outside of the research team. The information collected will be kept private and confidential. All information about you will have a number on it instead of your name. Only the researchers will know what your number is and that information will be under restricted access.

Who to Contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact any of the following:

Dr. Benson Chuma
bensonchuma@gmail.com
+254 726 731 662/ +27 719 514 629
Graduate student
Health Economics Unit- University of Cape Town

Veloshnee Govender
Veloshnee.Govender@uct.ac.za
Tel: +27 21 406 6752
Researcher and Lecturer
Health Economics Unit- University of Cape Town

If you want any information regarding your rights as a research participant, or complaints regarding this research study, you may contact Professor Marc Blockman at the University of Cape Town Faculty of Health Sciences Human Research Ethics Committee which is an independent Committee established to help protect the rights of research participants on telephone number 021 4066492

PART II: CERTIFICATE OF CONSENT

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant _____

Signature of Participant _____

Date _____

Day/month/year

STATEMENT BY THE RESEARCHER

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1. Participation in an in-depth interview as explained

2. Recording of the interview
3. Assurance of anonymity and confidentiality

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of Researcher _____

Signature of Researcher /person taking the consent _____

Date _____

Day/month/year

15.4 APPENDIX 4: Informed Consent Form-PRIVATE PURCHASERS

This informed consent form is for respondents working In Private Health Insurance firms in Kenya who are to take part in a study as detailed below involving in-depth interviews describing active purchasing mechanisms insurers in Kenya to purchase private health services. The study is for the purposes of fulfillment of requirements for an MPH dissertation at University of Cape Town, South Africa.

Name of Principal Investigator:	Dr. Benson Chuma
Organization:	Graduate Student, School of Public Health, University of Cape Town, South Africa
Project Title	Active Purchasing Mechanisms of Private Healthcare Services: Experiences of Public and Private Purchasers in Kenya

This Informed Consent Form has two parts:

- Information Sheet (to share information about the study with you)
- Certificate of Consent (for signatures if you choose to participate)

Respondents will be given a copy of the full Informed Consent Form

PART I: INFORMATION SHEET

Introduction

My name is Dr. Benson Chuma and I am currently conducting a study as part of my graduate program as described above. Your participation in this research is entirely voluntary. It is your choice whether to participate or not. The choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may change your mind later and stop participating even if you agreed earlier.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me

Purpose of the research

The aim of the study is to seek ways of improving health financing in Kenya by understanding the current active purchasing mechanisms in the country and how they could be improved on. I intend to describe active purchasing mechanisms in the country as follows:

- NHIF: use of capitation model in its outpatient medical scheme

- **Private Insurers: use of select strategic purchasing mechanisms to purchase services amongst private providers**

This questionnaire is in regard to private insurers as above. I will seek to understand how the above is implemented, challenges involved and in addition private providers' responses and influence on implementation of the above mechanisms.

Findings of the research are aimed at providing insight on how providers and purchasers actions influence outcomes of such active purchasing mechanisms with the hope that this knowledge can be used to influence policies favorable to roll out and expansion of active purchasing mechanisms

Participant Selection

You are being invited to voluntarily take part in this research because we feel that your experience in the Kenyan private health insurance sector will provide the relevant knowledge and insight we seek

Procedures

We are asking you to help us learn more about purchasing of health services from the private sector as above. If you accept, you will be asked to take part in an in-depth interview with the principal investigator which will last about one hour. The questions will entail describing how your institution (or private health insurers in Kenya in general) intervenes in clinical decisions making processes to ensure quality assurance and cost control in the management of in-patient plans. The discussion will also involve description of various sources of power (such as economies of scale, regulatory, monopoly/monopsony and bargaining capacities amongst others) between private providers and private health insurers and their influence on the outcomes of the efforts described above.

WE WILL NOT ASK YOU TO SHARE ANY CONFIDENTIAL, PERSONAL OR INSTITUTIONAL KNOWLEDGE THAT YOU ARE NOT COMFORTABLE SHARING.

The discussion will take place in a mutually agreed location, and will involve the respondent and the principal investigator. The entire discussion will be tape-recorded, but no respondent will be identified by name on the tape. Also, no comment or information from the interview will be ascribed to any respondent in particular. The tape will be kept securely under custodianship of the principal investigator and later on at the University of Cape Town. The information recorded is confidential and no one else except the research team will have access to the tapes. The tapes will be destroyed after about 6 months

Benefits

The study is aimed at contributing to the body of knowledge that supports an improved policy environment for purchasers to roll out and expand on active purchasing mechanisms. You will also personally receive a detailed report of the findings and policy recommendations prior to public dissemination or publication

You will not be provided any monetary incentive to take part in the research.

Confidentiality

We will not be sharing any information about the respondents with anyone outside of the research team. The information collected will be kept private and confidential. All information about you will have a number on it instead of your name. Only the researchers will know what your number is and that information will be under restricted access.

Who to Contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact any of the following:

Dr. Benson Chuma

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Graduate student

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Health Economics Unit- University of Cape Town

If you want any information regarding your rights as a research participant, or complaints regarding this research study, you may contact Professor Marc Blockman at the University of Cape Town Faculty of Health Sciences Human Research Ethics Committee which is an independent Committee established to help protect the rights of research participants on telephone number 021 4066492

PART II: CERTIFICATE OF CONSENT

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant _____

Signature of Participant _____

Date _____ **Day/month/year**

STATEMENT BY THE RESEARCHER

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

1. Participation in an in-depth interview as explained
2. Recording of the interview
3. Assurance of anonymity and confidentiality

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of Researcher _____

Signature of Researcher /person taking the consent _____

Date _____ **Day/month/year**

PART B

LITERATURE REVIEW

INTRODUCTION

This introduction provides an outline of the objectives of the literature review, description of the search methodology employed as well as the overall organization of the literature review. This literature review was undertaken to support the study on the implementation of strategic purchasing mechanisms in Kenya with the research question as follows:

How are select strategic purchasing mechanisms implemented in Kenya and what role do the various sources of power for purchasers and private providers have in influencing acceptance and adoption of strategic purchasing mechanisms by providers?

Purchasing in healthcare is described as the transfer of pooled resources to health service providers on behalf of the population for whom funds were pooled in exchange for health services. Purchasing could either be passive or active, in the latter purchasers do not simply act as financial intermediaries but play a more proactive role (Kutzin, 2001). Active purchasing is now commonly referred to as strategic purchasing (Honda, 2014).

The objectives of this literature review are as follows:

- a) To give an overview and background of the health financing system in Kenya with emphasis on health care purchasing
- b) To present an overview of the role of strategic purchasing in supporting the achievement of Universal Health Coverage (UHC)

- c) To present concepts relevant to purchasing of health services, an overview of the conceptual framework as used in the study, an overview of the concept of implementation, and an overview of the concept of power.
- d) To provide a summary of relevant literature on the implementation of strategic purchasing mechanisms

In order to identify relevant literature to achieve these objectives an initial search of PubMed and Google Scholar search engines was done for papers appearing between 2010 and 2014. Key words included *strategic purchasing, provider power, purchaser power, implementation AND strategic purchasing mechanisms, adoption AND strategic purchasing mechanisms, provider payment mechanisms, and the National Hospital Insurance Fund in Kenya*. Abstracts were reviewed, and papers were included as relevant if they met at least one of the following criteria: (1) were related to implementation of active/strategic purchasing and/or provider acceptance and adoption; (2) focused on sources of power for providers and purchasers (3) or showcased interactions between providers and purchasers in relation to implementation of active/strategic purchasing. There was a limited amount of relevant information on implementation of strategic purchasing retrieved for the period from 2010 to 2014 using the above search criteria and the initial search (which yielded 17 papers) was later broadened to include papers published from 2000 and up until 2018 (which yielded an additional 29 papers). We also searched for grey literature, presentations, news publications and relevant reports using google. Websites of various organizations such as leading media stations in Kenya, private purchasers in Kenya, the National Hospital Insurance Fund (NHIF) in Kenya, the Association of Kenya Insurers (AKI) and Insurance Regulatory Authority (IRA) were also

searched.

Organization of the sections

Section one provides a description of the economic and social context of Kenya and is then followed by a discussion of the healthcare financing environment in Kenya to help set the scene for the work. Section two provides an overview of strategic purchasing and provides a categorization of strategic purchasing mechanisms. Section three provides an overview of the conceptual framing of the study and an overview of relevant concepts including implementation research and power as applied in the study. Section four provides an overview of existing empirical evidence on implementation of strategic purchasing which is the focus of the study. The final section (four) summarizes the literature presented including gaps in literature and give relevant recommendations.

SECTION 1: DESCRIPTION OF THE KENYAN CONTEXT

Kenya is a low-income country located in East Africa with an estimated national population of 49 Million in 2017 with an annual population growth rate of about one million people (World Bank Group, 2018a). Kenya's economy is on the rebound in 2018 after slowed economic growth due to a prolonged electioneering period associated with political uncertainty in 2016 and 2017(World Bank Group, 2018a).

Kenya's GDP growth is expected to rise to 5.5% in 2018 and steadily to 6.1% in 2020 compared to a five year low of 4.8% in 2017 (World Bank Group, 2018a). Kenya's GDP per capita was estimated at USD 1,440 in 2017 being the largest economy in the East African region serving as a regional economic hub (World Bank Group, 2018a).

Kenya's current government has outlined 4 key priority areas for economic development for the political period ending 2022 that are dubbed 'the big four' that includes affordable housing, agriculture and food security, manufacturing and affordable health care for all (Government of Kenya, 2018). Because of the key goal of healthcare for all, the discourse on Universal Health Coverage (UHC) has received increased attention in Kenya. Additionally, the country seems to be back on the journey to achieving middle income status by year 2030, as per Kenya's economic blue print-Vision 2030 (Government of Kenya, 2007).

1.1 Social, economic and health indicators in Kenya

Kenya's economy is largely dependent on agriculture with a significant proportion of the population working in the agricultural and informal sectors. It is estimated that about 68 percent of people live in the rural areas and about 32 percent lives in urban areas (Kenya National Bureau of Statistics, 2010a). The latter have better access to social amenities such as health, water, sanitation and education amongst others. Results from the last census, 2009 (Kenya National Bureau of Statistics, 2010a) and the 2008 Kenya household Survey (Kenya National Bureau of Statistics, 2006) revealed that approximately 49 percent of the population were poor and were living below the poverty line with almost half of them (19 percent) identified as indigents. Health indicators are relatively poor with infant mortality rate estimated at 29.4 deaths per 1,000 live births in 2016 which is more than 15 times that of some developed nations (World Bank Group, 2018b). Maternal mortality is also comparatively high at 484 deaths per 100,000 live births which for example is more than 25 times that of the US (World Health Organization, 2013). Life expectancy in Kenya is still comparatively low although it has improved from 67 in 2000 to 71 in 2016 (World Bank Group, 2018b). While 92% of pregnant mothers attend antenatal care, only approximately 43% deliver in a health facility (Kenya

National Bureau of Statistics, 2010b). Kenya also suffers from a high HIV burden. However there have been significant gains in lowering prevalence from about 10% in the mid-nineties to about 6.2 percent in 2010. ARV coverage is also relatively high at 83.1 percent amongst eligible adults (National Aids Control Council, 2012). There has been a gradual increase in the incidence and prevalence of non-communicable diseases including cancers and cardiovascular illnesses that contributed to 28% of mortality (World Health Organization, 2013) which presents further challenges to the improvement of health outcomes. Thus, like most other developing countries the country is still faced with poor health outcomes despite making some gains in some health areas.

1.2 Overview of healthcare provision in Kenya

The Kenya health sector comprises a mixed public and private healthcare provision system. Public health services and facilities are organized in a tiered system and ranked on types and breadth of health services offered (Nyikuri et al., 2015). In 2010 following implementation of a new constitution, a devolved system of government composed of 47 independent and distinct administrative regions known as counties were established (Nyikuri et al., 2015). The counties manage all the lower level public facilities and provision of care that includes community health services, primary healthcare services and county referral services whilst national referral services are managed centrally by the Ministry of Health (Nyikuri et al., 2015). The private sector is composed of private for-profit, non-governmental organizations (NGO), and faith-based organization (FBO) facilities (Luoma et al., 2010). The private sector's role in provision of care in Kenya is significant as about half of all facilities (primary and tertiary) in Kenya are privately owned (Deloitte, 2011).. A majority of the large and well-established private providers are found in urban areas whilst smaller providers are found in the rural areas and smaller towns owned by sole proprietors such as nurses or doctors (Barnes et al., 2010).

1.3 Overview of health financing in Kenya

The World Health Organization (WHO) defines health financing as the “function of a health system that is concerned with mobilization, accumulation and allocation of money to cover the health needs of the people”, the goal of a health financing system is “to make funding available as well as to set the right financial incentives to providers to ensure that all individuals have access to effective public health and personal health care” (World Health Organization, 2000). There are three key functions of a health financing system, namely: revenue collection, pooling and purchasing with an overview of each provided below.

1.3.1 Revenue collection in Kenya

Revenue collection can be defined as the mechanisms by which health systems receive funds from households, organizations/companies or donor (World Health Organization, 2000). Revenue collection determines the amount of funds raised by a health system which then affects the type and amount of services that can be purchased. Revenue collection for health in Kenya is generated through: (1) various taxes and donor inflows to national and county governments, (2) member contributions to the National Health Insurance Fund, (3) member contributions to voluntary private insurance schemes and, (4) out-of-Pocket (OOP) expenditures at private and public facilities (Barasa et al., 2018, Chuma and Okungu, 2011). Public sources account for 37% of all total health expenditure (THE), whilst private sources accounted for 39.6% and donors 23.4% of THE in 2016 (Government of Kenya, 2017). OOP expenditures in Kenya are relatively high and stood at 27.7% of THE in 2015/16 (Government of Kenya, 2017). Health inequities are said to exist when payments for health services are not matched to ability to pay and households are at risk of financial catastrophe as a resulting of seeking care (Wagstaff and Van Doorslaer, 2000). The high OOP levels in Kenya creates inequities in revenue collection in Kenya (Barasa et al., 2018, Chuma and Okungu, 2011).

Further, the NHIF contribution rates and overall revenue collection system in Kenya is largely regressive as payments for healthcare amongst the poor comprise of higher proportions of their income compared to the wealthier populations (Barasa et al., 2018, Chuma and Okungu, 2011).

1.3.2 Pooling in Kenya

Pooling can be defined as the accumulation and management of collected funds to ensure that the financial risk of seeking healthcare is shared by all the members of a given pool (World Health Organization, 2000). Pooling can enable efficient purchasing of healthcare resources when purchasers have large pools with sufficient risk and cross subsidization mechanisms (Figueras et al., 2005).

Kenya's health financing system is characterized by limited pooling of health resources whereby existing pools are multiple, fragmented and have less than desirable risk and cross subsidization mechanisms (Munge et al., 2015). The NHIF forms the largest pool by membership size estimated to have 2.8 million principal members and 6.6 million lives covered which is approximately 17 % of the national population (Munge et al., 2017).

The bulk of the NHIF contributors are formal sector employees due to the mandatory nature of the NHIF deductions from monthly salaries (Munge et al., 2017). Within the general NHIF pool, there are some segments of the population enjoying enhanced benefits such as access to private facilities and optical and dental covers. Examples of these include the civil servants medical scheme introduced in 2012 who are arguably not amongst the poor segments of the population hence promoting inequities (Barasa et al., 2018). Further, there is also limited cross subsidization as these pools have dedicated funds that other pools cannot draw from (Barasa et al., 2018, Chuma and Okungu, 2011).

Voluntary private medical schemes comprise the other pools within the Kenyan health financing system. These schemes cover about 700,000 people totaling to only about 2 percent of the Kenyan population who are mainly in formal sector and relatively wealthier (Munge et al., 2015). Income and risk cross subsidization is thus limited within these pools as they are inaccessible to lower income populations hence promoting further inequities in the overall health system in Kenya (Chuma and Okungu, 2011, Munge et al., 2015).

The next voluntary pool is composed of the Community Based Health Insurance Schemes (CBHIS) targeting rural and low-income populations covering only 1.2 percent of the population – approximately 450,000 lives (Chuma and Okungu, 2011)

Thus, pooling in Kenya is highly fragmented and characterized by low levels of risk and income cross subsidization, this is true in the public and private sector. The fragmentation is also reflected by the presence of multiple purchasers in the market with most having limited power to implement strategic purchasing mechanisms (Munge et al., 2015) as discussed below.

1.3.4 Purchasing in Kenya

WHO defines purchasing as the process through which funds are paid to providers in exchange for a set of health interventions (World Health Organization, 2000). Purchasing involves determining what kind of health services (benefit packages) people are entitled to from a given pool, how people will access these services – as well as how providers will be paid for providing care (Kutzin, 2001).

This function determines not only how pooled health resources are used but also overall efficiency of resource utilization.

There are various organizations that serve the role of purchaser which frequently also handle pooling. Thus, understanding the organization and characteristics of healthcare purchasers can be the first step in outlining healthcare purchasing for a given country. Kutzin (2001) outlines two broad ways of describing and analysing health care purchasers within a health system:

- a) The market structures of the purchasing organizations as follows: whether there is a single payer or multiple payers; whether purchasers compete for market share; and whether in the public sector there is an organizational unit with explicit responsibility for purchasing of healthcare services,
- b) Their influence over provision of care, which can be described by whether they are passive purchasers or if they use their financial power to promote improved efficiency and quality of care.

Additionally, it is also important to identify what services they buy, which providers they buy them from, for which population segments they buy the services for, how they pay providers, and how much they pay providers (Busse et al., 2007, Preker et al., 2007).

Health care purchasing institutions in Kenya can be grouped as public and private. The NHIF is the sole public purchaser in Kenya (with several pools in the NHIF) whilst private purchasers include private health insurance firms and Community Based Health Insurance Schemes (CBHIs).

1.3.4.1 Public purchaser-NHIF

Kenya has a single national public purchaser known as the National Hospital Insurance Fund (NHIF) established in 1966 as a department within the Ministry of Health and currently receives its mandate

from the NHIF Act no 9 of 1998 (The National Hospital Insurance Fund Act No. 9 of 1998, 1998). The NHIF has the largest single pool by membership size in Kenya. The NHIF benefit package for all the members includes comprehensive cover for inpatient care at all public facilities and partial inpatient cover at select mission hospitals (National Hospital Insurance Fund, 2013). Over recent years the NHIF has expanded its benefit package for the general population to include outpatient medical care at private and public facilities managed through a capitation model and through FFS methods offered cover for cancer care including chemotherapy and radiotherapy services at private and public facilities, and minor and major surgery at public and private facilities and dialysis (National Hospital Insurance Fund, 2015, Munge et al., 2015, Abuya et al., 2015). The NHIF benefit package differs for various beneficiaries with some schemes such as civil servants having wider benefit packages than the general population (Abuya et al., 2015, Chuma and Okungu, 2011).

The NHIF has undergone various reforms including review of its provider payments system. In the past, NHIF only used fee-for-service for inpatient care whereby providers would be paid a fixed rebate pegged on number of days a patient was admitted (Chuma and Okungu, 2011). Overtime additional provider payments mechanisms have been introduced such as: (1) capitation for provision of outpatient care; (2) fee-for-service for some pools that have inpatient, outpatient dental and optical services covered; (3) case-based fixed payments for special packages such as: maternity, renal dialysis, surgery and chemotherapy, radiotherapy and radiology (Barasa et al., 2018). The NHIF purchasing of health services has evolved over time with introductions of other purchasing reforms such as adoption of quality assurance mechanisms across its provider network through the Kenya Quality Model for Health (KQMH¹), and contracting of more providers through

¹ KQMH is a conceptual framework for an integrated approach to improved quality of healthcare launched by the Ministry of Health in 2012. KQMH is underpinned by three approaches namely, evidence-based medicine, total quality management, and patient partnerships. Evidence based medicine supports development, dissemination and application of standards and guidelines. Total quality management involves use of quality improvement principles, use of master checklists enabling adherence to standards and guidelines. Patient Partnership involves ensuring community participation and involvement in health matters and decision-making processes. The framework uses a checklist to 'score' performance of an organization against established standards (Ministry of Medical Services & Ministry of Public Health and Sanitation, 2011)

selective accreditation whereby NHIF accredited providers by segmenting them into various levels of care based on the capacity of the provider to provide the services required for the different levels (Ministry of Medical Services & Ministry of Public Health and Sanitation, 2011).

In 2015, the NHIF introduced capitation when rolling out outpatient medical cover for all its beneficiaries, whereby providers are paid KES. 1,200 to 1,400 (approx. USD 12-14) per annum per member (Abuya et al., 2015). The payment is paid in advance to providers in four equal quarterly instalments based on number of beneficiaries allocated to providers who have adopted capitation. NHIF lists the outpatient services covered to include the following: consultation; treatment; basic diagnostic tests including laboratory and X-ray; day care surgery; and drugs under the Kenya Essential Drug List of 2010 (Barasa et al., 2018, Chuma and Okungu, 2011, National Hospital Insurance Fund, 2015).

1.3.4.2 Private purchasers

Non-state healthcare purchasing institutions in Kenya can be grouped as follows: private health insurance firms, health micro-insurance providers and Community Based Health Insurance Funds (CBHIs). Private health insurance firms further tend to classify themselves as either underwriters or as medical insurance providers (MIPs)-the latter equivalent to managed care organizations (Deloitte, 2011a).

In 2016 there were 40 private health insurance firms composed of 19 underwriters and 31 medical insurance providers (Association of Kenya Insurers (AKI), 2017) whose health insurance coverage totals to only about 3 percent of the Kenyan population (Barasa et al., 2018, Chuma and Okungu, 2011). Most of those covered by these schemes are in the formal private sector and live in urban areas. The schemes are highly fragmented with the largest pools averaging only about 100,000 lives covered and characterized by limited risk cross subsidization (Deloitte, 2011). In regard to

healthcare purchasing, they tend to offer mainly inpatient services with relatively wide and comprehensive benefits that allow access to most of the leading private healthcare facilities in the country (Munge et al., 2015). Benefit packages vary significantly across different pools as they are largely pegged on ability to pay for stated premiums (Chuma and Okungu, 2011, Munge et al., 2015). Fee-for-service (FFS) is the main provider payment mechanism used and has been associated with the poor financial performance of most insurers. Some of the consequences of FFS recorded in Kenya include provider over servicing, high administration costs and low incentives for promotion of preventative care over curative services (Deloitte, 2011, Munge et al., 2015). Further, most schemes are characterized by high claims loss ratios (claims incurred as a fraction of total gross premiums received by insurers) resulting in poor profitability (Association of Kenya Insurers (AKI), 2017, Munge et al., 2015). The high claim loss ratios have been attributed to various factors such as a high rate of medical inflation and private insurers having weak bargaining power compared to the major providers in the country (Association of Kenya Insurers (AKI), 2017, Munge et al., 2015). This poor financial performance has led to a number of private purchasers introducing various strategic purchasing mechanisms as a way of managing costs, improving sustainability and as part of quality assurance processes. These mechanisms include: hiring staff with a medical background that include case managers and medical managers; intervening in clinical decision-making processes; and the introduction of preauthorization processes for various services such as specialist care and referral services (Munge et al., 2015, Deloitte, 2011).

Despite having made some improvements in health outcomes over the last few years, Kenya's health system is still weak. There is renewed government focus on achieving UHC which provides an opportunity for addressing some of the weaknesses in the health financing system such as inequities in revenue generation, fragmented pooling systems and weak purchasing systems. As

mentioned, private purchasers in Kenya have made efforts to implement different strategic purchasing mechanisms to control costs and improve on quality of care.

SECTION 2: OVERVIEW OF STRATEGIC PURCHASING AND RELATED CONCEPTS

Strategic purchasing involves the process of continuously searching for the best ways to maximize health system performance by purchasers making decisions on which interventions to purchase, how, and from whom to purchase them. Purchasers are also actively involved in selective contracting of providers and design of incentive schemes that in order to maximize value for individuals and the population (World Health Organization, 2000).

2.1 Strategic purchasing and achievement of UHC

There is evidence that implementing strategic purchasing mechanisms can aid policy makers in ensuring that provider actions and objectives are aligned with the interests of both purchasers and patients and ultimately achievement of UHC (Lagomarsino et al., 2012, Tangcharoensathien et al., 2014, Xu et al., 2015). Towards this goal, Figueras et al. (2005) describes purchasing as a vital mechanism that safeguards three public interests within a national health system: quality, accessibility and affordability. They cite examples from France and Spain where purchasers use contracts that place significant emphasis on quality of care. Additionally, proper stewardship of the purchasing function is critical in promoting equity in access to care. Examples exist of purchasers in European countries using innovative provider payment mechanisms such as Diagnostic Related Groupings (DRGs) to lower costs of care such as in Spain, the United Kingdom and Czech (Figueras et al., 2005). It is advised that countries should adopt strategic purchasing mechanisms to achieve the goals of UHC (World Health Organization, 2010, Reich et al., 2016, McKee and Brand, 2005).

Strategic purchasing mechanisms can be categorized as follows (Kutzin, 2001):

- a) financial incentives and provider payment methods which may either transfer some of the financial risk for providing care to providers;
- b) having a pre-selected panel of providers whereby only services provided by such are eligible for reimbursement by purchasers;
- c) selective contracting with specific providers with negotiated fee schedules and specified utilization controls;
- d) managing accredited providers through various monitoring mechanisms and possible sanctions based on treatment, referral, prescribing and cost control behaviors;
- e) purchaser interventions in clinical decision-making processes to check inappropriate care and improve quality through mechanisms such as, pre-authorization of elective admissions, and;
- f) promoting use of standard treatment protocols to improve standardization.

These mechanisms hold great potential in improving resource optimization and helping purchasers overcome some of the health market inefficiencies favouring providers. Although this study does not apply the principal-agent framework it is an important concept in healthcare purchasing related to the study's focus on provider-purchaser relationships as briefly outlined below.

2.2. Principal-Agent Theory

A principal can be defined as a party wishing to secure provision of given goods or services but lacks the necessary specialized knowledge, skills or assets and hence has to contract an agent to undertake this task (Figueras et al., 2005). In this study providers are procured by purchasers as

agents to provide care to the purchasers' clients as outlined by Figueras (2005).

Principal-agent relationships are never perfect leading to problems due to various factors such as: the possibility of opportunistic behaviour of the agent that is often not in the best interest of the principal (Preker et al., 2007); presence of information asymmetry between purchasers and providers; self-interest behaviours of providers e.g. supplier-induced demand; and existing differential powers between agents and providers (Jan et al., 2005). Notably most of these factors favor agents over the principal and shift some power to the agent relative to the principal. These realities then call for the need to create incentives within contracts and provider payment mechanisms to better align the goals of providers, purchasers and patients (Pontes, 1995, Preker et al., 2007, Robinson, 2001).

Several key policy areas have been noted as important for policy makers to consider during the design and implementation of health financing reforms aimed at achievement of UHC including the benefit package design; mixed provider payment methods; governance; information management systems; management of stakeholder alignment and dynamics and sequencing of broader healthcare reforms (Mathauer et al., 2017). Provider payments mechanisms are a common approach to strategic purchasing, hence the next part deals with this in some detail. It should however be clear from above that provider payment mechanisms are not the only strategic purchasing mechanisms in the tool box available to purchasers.

Introduction of innovative prospective provider payment methods such as capitation is an important part of implementation of strategic purchasing. Shifting of some of the risks of providing care from purchasers to providers is an integral part of implementation of strategic purchasing.

2.3 Provider payment mechanisms

Provider payment mechanisms can be defined as the methods and mechanisms used to transfer resources to providers (Kutzin, 2001). These mechanisms can be used to promote desired health outcomes and goals by designing them to generate different economic signals and incentives that influence provider behaviours (Langenbrunner et al., 2005). Provider payment mechanisms can be classified as follows (Lagarde et al., 2010):

- a. Retrospective: such as salaries and fee-for service
- b. Prospective: such as budgeting, capitation and case-based payments.

Retrospective payment methods are whereby payment rates are set after services are offered and are prone to escalation of costs by providers compared to prospective payment methods whereby payments rates are set prior to provision of care (Lagarde et al., 2010). An important part of strategic purchasing includes provider payment reforms whereby introduction of prospective payment mechanisms is seen to improve efficiency by shifting some of the costs of providing care from purchasers to providers.

Capitation can be defined as payment rates to providers that are set prospectively to provide a defined package of care at a fixed sum per person enrolled with a provider for a defined period of time (World Health Organization, 2010). The amount paid within the agreed duration of time is usually based on the number of patients assigned to a provider and is not directly linked to the quantity of services offered by the provider (World Health Organization, 2010, Figueras et al., 2005). Capitation transfers the financial risk of providing care from purchasers to providers and incentivizes providers to be more efficient in resource utilization (Lagarde et al., 2010). However capitation may

also lead to negative provider behaviors such as excessive referrals of patients requiring expensive treatments, under provision of care (under-servicing) as well as a tendency to avoid less healthier and elderly patients in preference for those who are less likely to fall ill e.g. younger members (cream skimming) in order to maximize profits (Lagarde et al., 2010). However, to control these potential pitfalls, capitation models will normally have controls such as restrictions on referral mechanisms, enforcement of audits and implementation of different quality assurance mechanisms (Goldstein, 1996).

Key to implementation of capitation as well as any other provider payment method is the achievement of consensus between providers and insurers on payment rates per patient to ensure interests of both parties as well as patients are catered for (Langenbrunner et al., 2005, Lagarde et al., 2010, Kazungu et al., 2018, Goldstein, 1996).

2.4 Overview of interventions in clinical-decision making by purchasers

Purchasers in a bid to control costs of care and improve quality frequently get involved in directly or indirectly influencing the clinical-decision making processes of providers in a variety of ways (Kutzin, 2001). Hajjaj et al. (2010) define clinical decision-making in health as the process that clinicians undertake to make an informed judgment and choice about the treatment necessary for their patients. They further note that amongst the factors that influence decision making includes interventions by purchasers and policies set by purchasers to influence provider behaviors (Hajjaj et al., 2010). One such documented intervention relevant to this study includes use of preauthorizations and is briefly outlined below.

Preauthorization for specified services: Insurers may control costs and utilization of certain services by requiring providers to seek some form of approval from them before offering the services to

clients. Hence these authorizations commonly known as preauthorization are considered as a form of strategic purchasing (Kutzin, 2001). Such authorizations are common place and could be given over telephone calls, emails or in written form (Hansen et al., 2006). In the US, this is common and is even backed by laws enabling Medicaid (the government's social health care insurance program for low income citizens) to implement (Delate et al., 2005). There is evidence of pre-authorization mechanisms lowering cost of care without affecting health outcomes such as in its use by Medicaid for rationalizing use of proton pump inhibitors (anti-ulcers drugs) (Delate et al., 2005). However, there is also evidence that complying with multiple preauthorization requirements was costly and cumbersome to physicians in the US (Casalino et al., 2009).

2.3 Use of contracts and role of information asymmetry

As individuals and organizations specialize and exchange of goods and services occurs, agreements (contracts) are required to coordinate the resultant transactions through specifying each party's obligation. However, contracts are not without their limitations and they may not always be enforceable or verifiable (Figueras et al., 2005) as organizations and individuals (providers and purchasers included) are still opportunistic even amidst contracts (Preker et al., 2007). Contracts are also considered to be incomplete as individuals are limited in the amount of information they can understand and process, as well as the time with which to make a decision (Simon, 1997). This is typical in health systems whereby information asymmetries exist between purchasers and providers (Donaldson, 1995). Providers will thus tend to take advantage of the information asymmetry faced by purchasers (Donaldson, 1995) whilst purchasers will commonly use contracts to overcome information asymmetry and gain some power over providers (Kutzin, 2001).

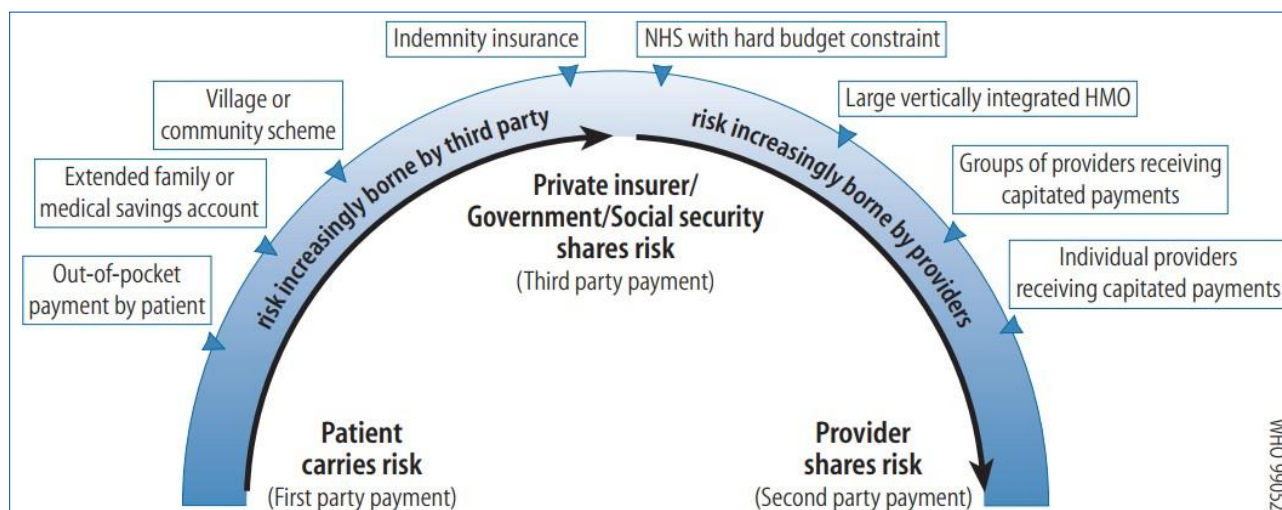
SECTION 3: CONCEPTUAL FRAMING, IMPLEMENTATION AND POWER

This section provides insight into the key concepts and lenses used in the study, to firstly understand how the strategic purchasing function can shift the risk of health care costs to the provider and then considers the key concept of implementation, as the study is concerned with how different source of power for purchasers and providers may be used to either influence or resist the implementation of strategic purchasing mechanisms in practice.

3.1 Conceptual framing: distributing the risk of health care costs

This study firstly considers a conceptual framework (Figure 1 below) introduced in the *World Health Report 1999* that outlines how different types of provider payment mechanisms and financing schemes distribute the risk of health care costs across various parties such as individuals, purchasers, governments, and providers (World Health Organization, 1999) as a starting point for thinking about the relationship between the purchaser and provider.

Figure 1 Impact of different financing schemes and provider payment methods on bearing the financial risks of providing care



The framework is based on the premise that prospective payment methods (such as budgets and capitated payments) are more effective in transferring the financial risk of providing care from purchasers to providers as compared to retrospective payment methods such as fee-for-service (World Health Organization, 1999). The transfer of risk is an important component in strategic purchasing because purchasers are then able to predict and lower costs of care, incentivize providers to be more efficient, and maximize value for limited funds by covering more people with more services (Lagarde et al., 2010, Mathauer et al., 2017, McKee and Brand, 2005, Robinson, 2001, World Health Organization, 2000, World Health Organization, 2010). On the bottom left segment, whereby the simplest payment methods are assumed, the patient carries all the financial risk as the patient pays the providers the full amounts for care provided. As you move to the right, the risks are spread to other third parties with purchasers (shown at the apex) bearing some of the risks, for example in the diagram the private insurers, governments and social security organizations involved now take up some of the risks of providing care on behalf of the individuals they cover. This is typically where the purchaser reimburses providers for providing care to a group of people covered

by the purchaser. These payments are usually largely retrospective and are commonly from general tax-funded national health systems and payroll tax-funded social health insurance systems as well as voluntary private health insurance schemes. As you move further to the right, prospective payment methods such as capitation are introduced whereby providers increasingly bear some of the risks.

3.1.1. The modified conceptual framework

This conceptual framework has been modified (Figure 2) for this study, we have now included additional strategic purchasing mechanisms in the framework that purchasers can also use to shift the risk of providing care to providers (Kutzin, 2001). This includes the use of contracts to selectively accredit providers, intervening in clinical decision-making processes, negotiating prices of care with providers, use of preauthorization processes, hiring staff with medical knowledge and use of step-down procedures. This is done in recognition that provider payment mechanisms are not the only mechanisms in the strategic purchasing tool box.

The implementation of change can be difficult, when a purchaser is seeking to increase the risk borne by providers this can result in challenges during implementation. Kutzin (2001) identifies the use of power as a mechanism in the implementation of change, “a critical factor for the performance of health care systems is the extent to which purchasers use their financial power actively to encourage providers to pursue efficiency and quality in service delivery”. Busse et al. (2007) note that the introduction of strategic purchasing mechanisms introduces new power balances and “responses might be positive or negative depending on whether providers see the introduction of strategic purchasing mechanisms as an opportunity or a threat”.

For this reason, the framework has also been modified to include sources of power for purchasers

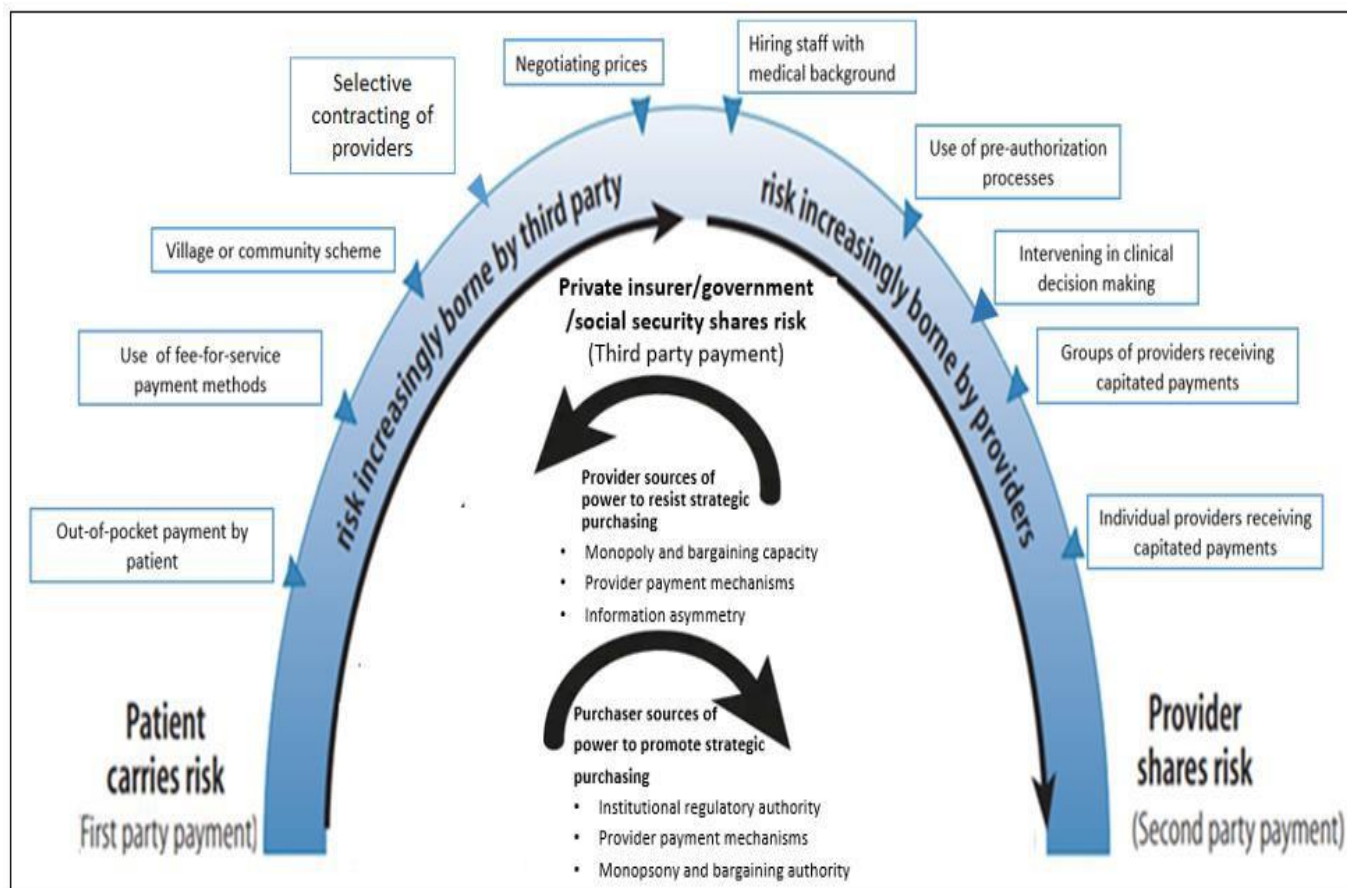
and providers as identified in literature; Kutzin (2001) and Pauly (1998) identify the sources of power for purchasers as; institutional regulatory authority²; prospective provider payment mechanisms such as capitation; having a market monopsony³ with a higher bargaining authority² over providers. Sources of power for providers include; having a market monopoly³ and hence a higher bargaining capacity⁴ over purchasers; retrospective provider payment methods such as fee-for-service; and the presence of information asymmetry is a source of power for providers (Kutzin, 2001, Pauly, 1998).

² Having institutional regulatory authority and hence high bargaining authority means that a purchaser has: authority to negotiate with providers about the expected quantity, quality, and availability of the interventions to be purchased and provided; ability to set and enforce the rules of the game; and responsibility of providing strategic direction for all the different actors involved

³ Purchasers can be said to have market monopsony power in a market when they are the only buyer in a market with multiple competing providers and are able to use their financial power to ensure that service delivery occurs in line with the objectives of efficiency and high quality

⁴ Providers are said to have market monopoly and hence higher bargaining capacity when there are few health providers controlling a significant market share that enables them to dictate prices and influence decision making in relation to cost, quality of care and type and quantity of interventions to be provided

Figure 2 Conceptual framework showing how providers and purchasers use their various sources of power to influence outcomes of implementation of various strategic purchasing mechanisms



3.2 Overview of the concept of implementation

Implementation research is a relatively new field in public health and medical research (Erasmus et al., 2014). It is a field suited for researchers who aim to understand the ‘*what, why, and how*’ new interventions work in the “real world” setting with a goal of exploring approaches on how best to improve on them (Peters et al., 2013). It is defined as “the scientific enquiry into questions concerning implementation—the act of carrying an intention into effect, which in health research can be policies, programs, or individual practices (collectively called interventions)” (Peters et al.,

2013). It can be applied to support implementation of health strategies and interventions by enabling the evaluation of *implementation outcomes*.

Implementation outcomes are the outcomes of implementation, outcome 'variables' include the following: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage and sustainability (Peters et al., 2013). Two of these outcomes (adoption and acceptability) that are of interest in answering our research question are defined as follows (Peters et al., 2013):

- Acceptability is defined as the perception amongst stakeholders of a given intervention and the extent to which the intervention is agreeable to them. These stakeholders could include consumers, managers, policy makers, providers as well as purchasers;
- Adoption is defined as the intention, initial decision or action to try to employ a new intervention. The degree and level of uptake and utilization of a given intervention by stakeholders is also viewed as a component of adoption.

In this study implementation is understood through the lens of the acceptability and adoption of the strategic purchasing mechanism as these concepts represent implementation outcomes. When studying implementation, researchers should also be cognizant of the fact that implementation does not happen at once but in stages and will most likely not happen smoothly (Fixsen et al., 2005). Bhattacharyya, Reeves & Zwarenstein (2009) note that despite the existence of a large number of systematic reviews of implementation interventions, most of the fundamental questions regarding what approaches should be used in which settings and for which problems remain unanswered (Bhattacharyya et al., 2009).

3.3 Overview of the concept of power

Literature in political science defines power as a relationship between two people (or parties) whereby person *A* is said to have power over person *B* to the extent that *A* can get *B* to do something that *B* would not have otherwise done (Dahl, 1957). Although Dahl (1957) uses mathematical reasoning to further express this definition, he still acknowledges that it is quite difficult to come up with a firm definition of power as power is an intuitive phenomenon. Walt and Gilson (1994) and Erasmus and Gilson (2008) agree that the influence of power is evident, has an unquestionable role in health policy, and is at the heart of health policy. They also note that ironically, it is startlingly seldom considered in the health policy implementation literature for LMIC (Erasmus and Gilson, 2008, Walt and Gilson, 1994). There is also limited literature on this concept and its role in implementation of strategic purchasing mechanisms.

In summary, purchasers will use contracts as per principal-agent theory to overcome the effects of information asymmetry between them and providers, ultimately shifting risk. Shifting from passive to strategic purchasing is documented to accelerate achievement of UHC (World Health Organization, 2010, Reich et al., 2016, McKee and Brand, 2005). Purchasers may use their various sources of power to influence the acceptability and/or adoption of a strategic purchasing mechanism. Providers may find a strategic purchasing mechanism unacceptable and resist adoption of the mechanism. Implementation research is relatively new in health research but its application in strategic purchasing may yield valuable insights for policy makers on the how to of strategic purchasing.

SECTION 4: OVERVIEW OF EXISTING EMPIRICAL EVIDENCE ON THE IMPLEMENTATION OF STRATEGIC PURCHASING

4.1 Evidence on provider adoption and acceptability of strategic purchasing

While still limited, there is a growing body of empirical evidence on the implementation of strategic purchasing mechanisms. The available studies point to mixed reactions by providers to implementation, these reactions are driven by economic and non-economic considerations.

It is well documented that a number of low and middle income nations have implemented shifts from FFS payment methods to capitation. (Mills et al., 2000). In the UK there has also been a shift from using salaries to pay general physicians to capitation based payments (Figueras, Robinson & Jakubowski, 2005). The available studies point to mixed reactions by providers to implementation. For example, whilst introduction of prospective global budgets in Europe was associated with providers offering more preventative care, it was also associated with under provision of services by avoiding offering expensive services (Jegers et al., 2002). Fee for service payments on the other hand promoted longer hospital stays amongst providers in Europe (Cylus & Irwin, 2010).

Under capitation, the capitation rate has often been found to be not acceptable to providers, hence influencing decisions to adopt or not. A study carried out in 2010 in one state in Nigeria showed that 93% of the public and private providers included in the study felt that the capitation rates offered per enrollee by the national social insurance were too low for them to provide quality care and maintain their operations sustainability (Robyn et al., 2012). A study focusing on the response of providers to implementation of capitation in Thailand found that providers initially deemed the capitation rates too low and were apprehensive (Mills et al., 2000). However, after realizing that

they could enrol more healthy adults the rates were viewed more favourably.

Evidence from Ghana and Kenya shows that providers consider various economic factors when deciding whether or not to enroll with social insurance schemes as follows: popularity of the scheme with the citizens hence the potential for higher revenues; pressure from existing clients; and potential for consistent cashflow (Sieverding et al., 2018). Similarly, an assessment in Rwanda on the impact of implementation of pay-for-performance mechanisms revealed that providers focused more on services that had higher payment rates such as delivery but with less focus given to services with lower payment rates such as immunization (Basinga et al., 2011). The payment rate is thus an important economic factor considered by providers that affects firstly the acceptability and ultimately the full adoption of a given strategic purchasing mechanism.

Other economic factors identified in literature that promote provider acceptance and adoption of different strategic purchasing mechanisms include: models with timely payments to providers (Mohammed et al., 2014, Agyepong and Nagai, 2011); and shorter payment schedules in comparison to longer ones such as quarterly payments were preferred to annual payments (Robyn et al., 2012).

A study looking at the determinants of provider acceptance of the introduction of capitation payments amongst dentists in the USA found that larger practices were more likely to accept capitation payment as they could bear the actuarial risks involved compared to smaller practices (Conrad et al., 2009). Practices charging relatively higher fees were however more likely to resist capitation compared to those charging lower fees (Conrad et al., 2009).

There are also non-economic considerations by providers. For example, providers prefer capitation

models with existing feedback mechanisms as part of monitoring and quality assurance (Olafsdottir et al., 2014). Additionally, providers also value inclusion of quality assessment mechanisms that also factor in overall facility performance as it is difficult to assess quality of care objectively from individual health care worker performance assessments (Agyepong et al., 2014). A study in Tanzania identified that healthcare workers were concerned about lack of resources, poor availability of supplies and unfavourable community preferences in relation to implementation of pay-for-performance models. (Olafsdottir et al., 2014). A study on implementation of capitation in Ghana showed that majority of the providers felt that the choice to pilot capitation in a region known as Ashanti was ill advised as some clients associated the region's political affiliations to the capitation model leading to misconceptions about the capitation model (Agyei-Baffour et al., 2013).

Very recent literature from Kenya also provides some evidence on provider acceptance and adoption of strategic purchasing. A paper focusing on experiences of providers with capitation and FFS payment methods found that most of the providers surveyed felt that the NHIF capitation rates were low and needed to be revised upwards (Obadha et al., 2018). Further, providers favored FFS models implemented by private purchasers and the NHIF as the expected revenues were more predictable compared to capitation models implemented by the NHIF as providers had limited knowledge on the number of enrolees allocated to them (Obadha et al., 2018). Some of these provider perceptions and experiences could be due to poor planning and implementation of provider payment methods by purchasers as was noted to be the case with the NHIF whereby another recent study notes that there was little involvement of providers in the design and pricing of the NHIF capitation model (Munge et al., 2017). For improved provider adoption and acceptance of strategic purchasing mechanisms, purchasers should thus ensure that there are sufficient mechanisms (such as provider and patient feedback processes to the purchaser) put in place to

allow continuous improvements and reforms during implementation of new and existing strategic purchasing mechanisms (Obadha et al., 2018, Sieverding et al., 2018).

4.2 Evidence on the role of power in implementation

Some studies focused on strategic purchasing provide some insight into the influence of purchaser and provider power on outcomes of implementation as outlined below.

Munge, et. al (2018) in a recent assessment of the NHIF noted that NHIF uses regulation authority as a source of power over providers through accreditation and de-gazettement of providers based on the standards set by the NHIF. The NHIF has the power to accredit providers as well as to de-gazette providers based on standards set by the NHIF (Munge, et. al, 2018), they thus have regulatory authority as a source of power over providers.

The NHIF also uses its hired quality assurance officers and medical officers (Munge et al., 2015) as part of strategic purchasing efforts aimed at overcoming information asymmetry enabling the NHIF to ensure that set standards are clearly met. In Iran purchasers used various mandatory regulations governing providers' behavior as a source of power to influence provider adoption and acceptability of the mechanisms (Gorji et al., 2018). Ginsburg (2010) reported that several states whilst purchasing health services in the US adopted a regulatory approach in the 1970s and 1980s to limit the rates payable to providers in reaction to growing provider power (Ginsburg, 2010).

It is not only provider payment mechanisms that can be used to control costs, other strategic purchasing mechanisms can also be effective. In Nigeria, the social purchaser implemented a preauthorization processes as a strategic purchasing mechanism to manage referrals of patients (Ibe et al., 2017).

Ghoddooosi-Nezhad et al (2017) note that large purchasers can use their size to take advantage of economies of scale and better bargaining capacity (monopsony power) to deal with natural monopolies that providers frequently enjoy. These providers can use their monopsony power to influence provider costs as well as quality of care provided (Ghoddooosi-Nezhad et al., 2017). Pauly (1998) reported that purchasers with significant monopsony in the USA were able to use their market power to reduce medical costs as they were able to negotiate for lower prices from the providers. Kutzin (2001) adds that market share can be a potential source of power for purchasers in a 'single payer' setting as the purchaser has monopsony over the providers. Kutzin (2001) further notes that this power may be used by insurers to effectively lower provider costs and to even promote improved quality and efficiency amongst providers. However, there may also be negative consequences in instances where there is minimal competition for purchasers to the detriment of providers and insurers. For example, such monopsony has led to many of the health insurance companies in Latin America having a lot of bureaucracy due to lack of competition (Kutzin, 2001). Kutzin (2001) further argues that supply side focused interventions such as provider payment methods are more effective policy tools than those focused on the demand side and thus the extent to which purchasers use their financial power to influence provider behavior is critical to the success of a health financing system.

In addition to financial and regulatory power, purchasers can also use other mechanisms to exercise their power over providers such as contracts that guide providers to set practices; as well as intervening in clinical care amongst other interventions (Kutzin, 2001).

There are various sources of power for providers found in literature. Munge et. al (2018) noted that private providers in Kenya can use their monopoly as a source of power to dictate prices of services

to private purchasers. Private providers in Kenya are also documented to wield significant power through creation of powerful interest groups active in the health making processes (Barasa et al., 2018). A recent review of strategic purchasing across 10 European countries noted that providers in France and Germany used their professional and provider unions as a source of power to influence decision making around deployment of human resources across various public hospitals (Klasa et al., 2018).

In addition to power dynamics between providers and purchasers, there are also other factors that can influence implementation of strategic purchasing such as the extent of the provider-purchaser split (Docteur and Oxley, 2003) and tensions between technical and political considerations (Koduah et al., 2016). A recent study notes that in order to support implementation of strategic purchasing, policy makers should strive to create powerful, autonomous purchasers that have the legal mandate, data, and economic power needed to implement strategic purchasing (Klasa et al., 2018). Evidence from Ghana shows that policy makers need to ensure that purchasing reforms are managed from a holistic systems perspective rather than linear perspectives, as the latter fails to account for the effects of existing context and stakeholder dynamics (Agyepong et al., 2014). Availability of an enabling regulatory framework and governance structure is also important (Reich et al., 2016, Langenbrunner et al., 2009, Kutzin et al., 2010). Additionally, policy makers should also ensure that challenges of the other health system functions and more so stewardship and governance of health systems should not be ignored during implementation (Ghoddooosi-Nezhad et al., 2017).

In summary thus, although there is somewhat limited research on the role of provider and purchaser sources of power in influencing the implementation outcomes of strategic purchasing mechanisms,

the few existing studies done show that these sources of power indeed have an influence on implementation and should not be overlooked. However there have been few implementation research studies focused mainly on implementation outcomes of the various ongoing health finance reforms that include purchasing reforms. More implementation research studies are needed to build the knowledge base on strategic purchasing and moreover, the need for further research on the concept of power has also been identified to help health policy makers in LMICs better engage with the nature of reform (Erasmus & Gilson, 2008). Therefore, this research seeks to contribute to this knowledge base.

SECTION 5: CONCLUSION

Health care purchasing is not only an integral part of health financing systems but of overall health systems. In Kenya there is a growing body of research that not only documents the health system but also the health financing landscape. Although there have been major gains in improving health outcomes in the country, there is a wide body of literature that points out that a lot remains to be done especially in strengthening the health financing system.

Health outcomes in Kenya are poor with examples of life expectancy and maternal mortality rates being undesirable because of an overburdened public health system. The health financing system is also weak. Total funds mobilized are insufficient and revenue collection is not equitable. Pooling is fragmented and characterized by low levels of both income and risk cross subsidization. There are two main groups of purchasers: the NHIF and private purchasers. The NHIF has introduced mechanisms to try and improve its purchasing functions by introducing strategic purchasing

mechanisms such as capitation-based payment methods and is making moves to shift away from FFS. However, it is still faced with major challenges including acceptability of capitation amongst providers, lack of accountability as well as insufficient revenue generation (Barasa et., al 2018). Private purchasers in the country are numerous resulting in fragmented pools (Munge, et al., 2018). These factors in addition to providers having various sources of power such as a monopoly and high bargaining capacity serve as limitations to their efforts to implement strategic purchasing mechanisms (Munge, et al., 2018). Some of these mechanisms include hiring staff with medical knowledge, use of preauthorization processes, selective contracting of providers and intervening in medical decision-making processes (Deloitte, 2011, Munge et al., 2015).

Various economic theories and concepts of healthcare purchasing are applied in this study and are important in understanding some of the nuances around implementation of strategic purchasing. Examples the use of contracts to overcome information asymmetry, principal-agent theory, the vital role of strategic purchasing in achievement of UHC and the role of power.

The conceptual framework used outlines that providers will use their various sources of power to resist adoption and acceptance of strategic purchasing mechanisms that they perceive shift too much of the risk of providing care to them. Purchasers on the other hand will use their sources of power to promote provider adoption and acceptance of these mechanisms.

In regard to empirical evidence on implementation of strategic purchasing, there is a growing number of studies emerging from Sub-Sahara Africa including Kenya and the surrounding countries (with a number of studies on experiences from Ghana's national health insurance scheme) available. However, there are still limited studies on role of various sources of power for providers and purchasers in influencing implementation outcomes. As such there is limited information to what

extent purchasers can use their sources of power to influence provider adoption and acceptance of various strategic mechanisms in a way that still ensures that this is a good relationship between providers and purchasers to support successful implementation. Additionally, there is limited knowledge on how purchasers can respond to providers using their various sources of power to resist implementation.

Whilst no two contexts can be fully similar, there is need for more studies within Sub-Saharan Africa to support policy makers not only in generating contextual insights but to also aid in sharing of experiences in the region. Such research has the potential to not only inform stakeholder and policy implementers on how to effectively implement policies and promote efficiency but also on how to use the limited resources available to accelerate progress towards universal health coverage.

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PART C:

JOURNAL READY MANUSCRIPT

Title: Case Study: Implementation of strategic purchasing mechanisms amongst private providers in Kenya by public and private purchasers

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Abstract

Background: Strategic purchasing can play a critical role in supporting the achievement of Universal Health Coverage by promoting efficiency. Purchasers in Kenya have implemented various strategic purchasing mechanisms with varied outcomes but there is limited knowledge on implementation from purchasers and providers perspectives. Whilst purchasers may use their power to promote implementation, providers may use their power to resist implementation. This study documents the role of power in influencing implementation of strategic purchasing in Kenya.

Methods: A multiple-case study design composed of two units of study is used. Case one comprised implementation of capitation by Kenya's public purchaser -National Hospital Insurance Fund (NHIF). Case two comprised implementation of a few strategic purchasing mechanisms by two private purchasers. Data was collected from 8 in-depth interviews (staff from private providers, public and private purchasers and an industry expert) and relevant documents (provider-purchaser contracts, newspaper articles and grey literature). A modified conceptual framework outlining how purchasers use strategic purchasing to shift risks of providing care to providers, considering providers' and purchasers' powers was used to frame analysis. Cross case analysis was used to compare findings.

Results: The NHIF used its regulatory authority in the design of the capitation model and its monopsony power to incentivise some private providers to adopt capitation. Some small providers accepted and adopted the scheme due to prospects of economic gains. Some large private providers perceived the capitation rates as too low and used their monopoly power that conferred them bargaining capacity to boycott capitation. Dialogue and consensus building between the NHIF and private providers was lacking during implementation of

capitation. In case two, private purchasers used contracts to implement a variety of strategic purchasing mechanisms with mixed outcomes. Information asymmetry was a source of power for providers despite purchasers' effort to counter it.

Conclusions: Power plays both an enabling and disabling role in implementation of strategic purchasing – whilst purchasers have significant power, providers too have powers that can counter good intentions. Policy makers should expect private providers may resist implementation of mechanisms that shift too much financial risk to providers. Dialogue and stakeholder engagement may support implementation of strategic purchasing.

Keywords

Strategic Purchasing, Implementation, Power, Kenya

Background

The United Nations General Assembly in 2015 [1] adopted a resolution on Universal Health Coverage (UHC) highlighting the growing recognition of UHC as a global goal worth pursuing. Under Sustainable Development Goal (SDG) 3, target 3.8 encourages countries to strive for achievement of UHC, defined as ensuring that all citizens are able to access relevant health care whenever they are in need, and in a manner that ensures they are not exposed to financial hardship[1, 2]. The World Health Report 2010 [3] states that health financing systems need to be designed to specifically ensure that they are aligned to attainment of UHC. A health financing system is defined as that part of a health system that is concerned with the mobilization, accumulation and allocation of financial resources to provide health coverage for a population according to the population's needs and whose main purpose is to make funding available and set the right financial incentives to providers to be efficient[2]. The intermediate objectives of a health financing system include ensuring service use is relative to need; promoting efficiency in resource utilization; promoting quality; and ensuring transparency and accountability in resource utilization – achieving these objectives can contribute to achieving UHC over time [3]. Within a health financing system, the *purchasing function* can contribute to achieving these intermediate objectives [2, 3] with evidence from various contexts in Africa[4], Asia[5] and developed nations[6] documented.

Purchasing is the process whereby pooled funds from various sources such as general tax and contributory mechanisms are transferred to healthcare providers to obtain services on behalf of a given group of beneficiaries or population [7]. Purchasing can either be *passive* or *active (strategic)*. Passive depicts purchasers simply pay bills when presented by providers whilst strategic purchasing involves processes that requires continuous searches for the best mechanisms to maximize value for funds by deciding which interventions should be purchased, how, and from whom [2, 8]. A key decision in strategic purchasing is how to pay

providers; this involves the use of various provider payment mechanisms and contractual arrangements by purchasers as sources of power to influence provider behaviour and shift the risk of providing care to providers to promote efficiency in resource use [9, 10]. Strategic purchasing is however not only limited to provider payment mechanisms, it also includes other mechanisms such as: monitoring quality of care provided; use of gate keeping mechanisms for select services such as referral services; and selective contracting of providers [11-13]. Although providers may resist implementation of strategic purchasing mechanisms, purchasers can nonetheless use their sources of power over the providers to influence provider actions in order to align provider actions with intended health policy outcomes [8, 10]. Power in this study is defined as a relationship between two people (or parties) whereby person *A* is said to have power over person *B* to the extent that *A* can get *B* to do something that *B* would not have otherwise done [14]. Various sources of power for providers and purchasers are identified in literature [7, 15-18] and are applied in the conceptual framework as outlined in the next section.

Purchasing in Kenya

Kenya has made bold declarations on its intention of achieving UHC [19]. Strategic purchasing has been named as one of the key policy levers that will be used to support Kenya's progress to achieving UHC [19]. There are two main groups of purchasers in Kenya that pool funds and procure services from public and private providers. These purchasers include (1) the public social purchaser known as the National Hospital Insurance Fund (NHIF) and (2) multiple private purchasers [20]. Some of the strategic purchasing mechanisms used by the NHIF include roll out of innovative provider payment mechanisms such as capitation, adoption of quality assurance mechanisms across its provider network, and selective contracting of providers [21, 22]. The NHIF purchases services for roughly 20% of the Kenyan population and

procures health services from both public and private providers [23]. The NHIF has an estimated 1,600 public and private providers within its network of providers whereby the latter are estimated to comprise two thirds of total providers contracted by the NHIF [24]. The NHIF has a standardized accreditation and contracting process for all private facilities in Kenya [25]. Since its inception in 1966 the NHIF purchased services from public and private providers using fee-for-service provider (FFS) payment mechanisms and in 2010 introduced capitation for provision of outpatient care for civil servants and further in 2015 used capitation as a strategic purchasing mechanism to roll out an outpatient medical scheme for all its other beneficiaries in Kenya as part of wider NHIF reforms [23, 25-28].

Strategic purchasing mechanisms implemented by private purchasers in Kenya include hiring staff with medical knowledge, use of preauthorization processes, selective contracting of providers, use of step-down measures and intervening in medical decision-making processes [23, 29]. Private purchasers purchase services for roughly 2% of the population [23, 25]. Private purchasers in Kenya also purchase services from the same private providers but each private purchaser has its own accreditation and contracting process for private providers with the main provider payment mechanism being FFS [23, 30].

The NHIF covers approximately only 20% whilst private insurers cover only 2% of the population. Thus, most Kenyans have no formal health insurance cover and depend on either out-of-pocket expenditure for health or accessing services from the public sector under tax funded mechanisms[23-25].

The role of private providers in healthcare provision in Kenya is important as there are about 5,234 public and 5,646 private (non-state) providers in Kenya [31].

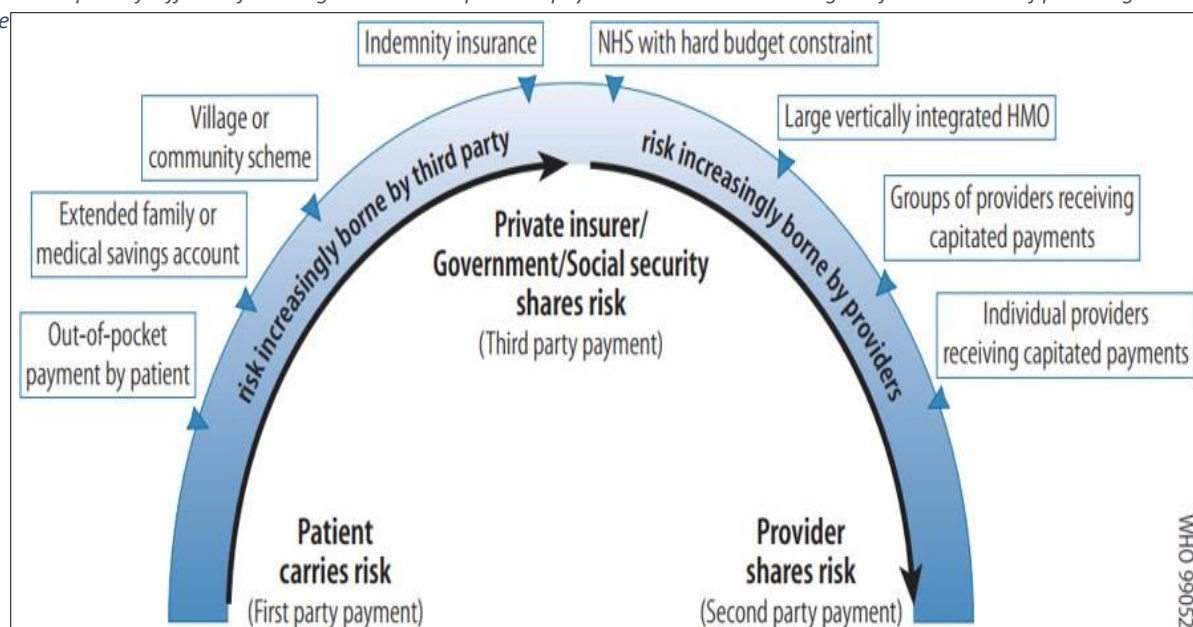
It's recognized that purchasers in Kenya will need to make several strategic decisions to support achievement of UHC including improving efficiency, cost containment, quality improvement and access [19]. Although past reforms focussed on health financing and purchasing in Kenya have noble intentions, there are still several gaps and weaknesses in key policy areas that policy makers and purchasers need to focus on such as: ensuring equity, ensuring benefit package design processes are guided by evidence-based decisions, promoting efficiency, and management of stakeholder dynamics [22, 32-36]. Existing literature notes that both private and public purchasers in Kenya are yet to fully implement effective purchasing mechanisms [23, 37]. As mentioned above, both the NHIF and private purchasers have implemented some strategic purchasing mechanism in the last few years. While there have been recent efforts to document these implementation experiences [27, 37-40], overall knowledge on the role of power in influencing the outcomes of implementation of strategic purchasing is still relatively limited [23]. This study using a multiple case study design with two cases aims to contribute to knowledge on the role of power in the implementation of strategic purchasing in Kenya.

This paper specifically explores sources of power for purchasers (the NHIF and private purchasers) and sources of power for private providers and the resultant influence on two implementation outcomes, namely the *acceptability* and *adoption* of the select strategic purchasing mechanisms by private providers in Kenya. *Acceptability* can be defined as the perceptions among private providers of the strategic purchasing mechanisms and the extent to which these mechanisms were agreeable to them [41]. *Adoption* is defined as the intentions, initial decisions, and actions of private providers towards implementation of the strategic purchasing mechanisms [41].

Conceptual framing for the research

The starting point for this study is a framework (Figure 1 below) introduced by the WHO *World Health Report 1999* showing how different types of provider payment mechanisms that when implemented by purchasers shift the risk of providing care across various parties including purchasers and providers [42]. Specific to implementation of strategic purchasing, this framework illustrates purchasers shifting from retrospective to prospective provider payment methods.

Figure 1 Impact of different financing schemes and provider payment methods on bearing the financial risks of providing care



The above framework is then modified to include the key concept of power as shown in figure 2.

Sources of power for purchasers include: (1) institutional regulatory authority⁵; (2) the use of prospective provider payment mechanisms such as capitation which can be used to transfer more risk to providers compared to retrospective mechanisms such as FFS [2, 3]; and (3) having market

⁵ Having institutional regulatory authority and hence high bargaining authority means that a purchaser has: authority to negotiate with providers about the expected quantity, quality, and availability of the interventions to be purchased and provided; ability to set and enforce the rules of the game; and responsibility of providing strategic direction for all the different actors involved

monopsony⁶ and higher bargaining authority² over providers that enables them to control providers behaviours including adoption of strategic purchasing mechanisms [15, 16, 18]. Sources of power for providers include: (1) market monopoly⁷ and hence higher bargaining³ capacity over purchasers; (2) retrospective provider payment methods such as FFS which offers them opportunities to bill more for services offered; and the presence of information asymmetry⁸ which enables providers to have the upper hand in deciding which interventions to use when offering care [7, 15-17, 43, 44]. We hypothesize that purchasers will use their various sources of power to promote/influence provider acceptability and adoption of strategic mechanisms that shift risk from purchasers to providers, whilst providers will also use their sources of power to resist the adoption of mechanisms that shift the risk of providing care to them [15-18].

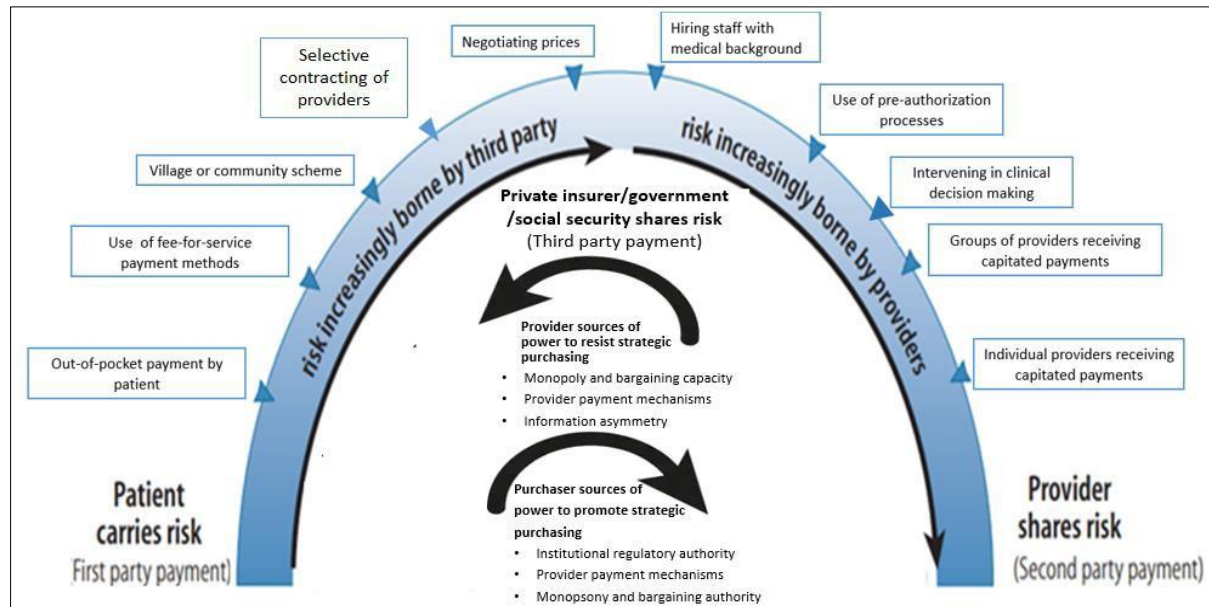
This hypothesis is applied to the study which aims answer the following research question. *How are select strategic purchasing mechanisms implemented in Kenya and what role do the various sources of power for purchasers and private providers have in influencing acceptance and adoption of strategic purchasing mechanisms by providers?*

⁶ Purchasers can be said to have market monopsony power in a market when they are the only buyer in a market with multiple competing providers and are able to use their financial power to ensure that service delivery occurs in line with the objectives of efficiency and high quality

⁷ Providers are said to have market monopoly and hence higher bargaining capacity when there are few health providers controlling a significant market share that enables them to dictate prices and influence decision making in relation to cost, quality of care and type and quantity of interventions to be provided in relation to purchasers.

⁸ Providers are said to use information asymmetry as a source of power when they take advantage of having more or better information than purchasers. This enables purchasers to have power to influence consumer demand for healthcare and to circumvent regulations set by purchasers to control costs and provider behaviours.

Figure 2 Conceptual framework showing how providers and purchasers may use sources of power to influence the implementation of various strategic purchasing mechanisms



Methodology

A case study design will enable in-depth examination of the implementation of strategic purchasing mechanisms by allowing the researcher to investigate this phenomenon in depth and within its real-life context [45, 46]. This study design also permits the researcher to answer 'how' questions through explanatory study components and to generate findings from real-life context [45]. The two cases in the study are as follows:

- Case 1: Implementation of capitation by the NHIF in 2015,
- Case 2: the implementation of select mechanisms private purchasers in Kenya including hiring staff with medical knowledge, use of preauthorization processes, selective contracting of providers and intervening in medical decision-making processes.

Data collection

Purchasing organizations for this study were purposively selected. The NHIF was chosen as it is the sole public purchaser in Kenya. Private purchasers were selected purposively (see

selection criteria in Table 1 below). Purposive sampling in implementation research allows researchers to narrow down to cases that can yield rich information and insights of interest to a researcher [47]. This selection criteria allowed the researcher to focus on institutions that were likely to yield the most insights for the study such as: those known to be actively involved in intervening in provision of medical care and organizations large enough to have the resources needed to invest in strategic purchasing mechanisms. Using the selection criteria, four private purchasing organizations emerged (see Table 2) whereby all were approached and two of the most willing were selected for the study.

Table 1 Selection criteria for private purchasers in Kenya

Inclusion and exclusion criteria for private purchasers in Kenya	
1.	a registered private insurance firm or a firm registered as a private medical insurance company offering inpatient medical insurance as one of its products;
2.	a health insurer who can be deemed to be a major player in the sector by being amongst the top four health insurers by market share by gross total premiums as shown in Appendix 1 [48].
3.	a health insurer that carries considerable financial risk as an underwriter in offering health insurance plans as it is this risk that compels purchasers to employ strategic purchasing mechanisms to transfer some of the financial risks of meeting patient's medical needs to providers[7].
4.	Institutions having both payer and provider arms (also known as HMOs), third party administrators, CBHIS and employer self-funded schemes are thus excluded to narrow focus on purchasers who bear significant financial risk.

Table 2 Overview of the main eligible private purchaser institutions for study [28, 30]

Private purchasing organization	Comments in relation to our selection criteria
Jubilee	Highest market share by gross annual medical premiums (2014) Has Inpatient and outpatient plans for groups and individuals
AAR	Second largest medical insurer by market share (2014) Inpatient and outpatient plan for groups and individuals, previously operated as a HMO
CIC	Third largest medical insurer by market share (2014) Has Inpatient and outpatient plan for groups and individuals Has the largest pool for low cost products -30,000 lives
UAP	Fourth largest medical insurer by market share (2014) Has Inpatient and outpatient plan for groups and individuals

Participants for interviews from the three organizations (the NHIF and the two private purchasers) were selected purposively. Purposive sampling in qualitative research allows selection of respondents in a manner that enables gathering of views from a wide range of perspectives [49]. Hence, staff working from strategic to operational levels were targeted. The recruitment process involved reaching out to the head of the organization via email or call, followed by a face to face meeting whereby they would select suitable staff from their organization to participate in the study. The synopsis, questionnaires and the full protocol with consent forms was shared in advance prior to data collection with the chosen respondents. Selection criteria for participants who were interviewed from both cases is as shown in table 3 below.

Table 3 Selection criteria for interviewees

Selection criteria for selection of interviewees
<ol style="list-style-type: none"> 1) Must have experience in either formulating, rolling out or implementing the strategic purchasing mechanism of interest 2) Must have worked in the health insurance industry for a minimum of 3 years for operational/junior staff and 5 years for management/senior staff for both public and private insurers so as to provide the required insight from personal and institutional knowledge acquired over these years 3) 3) Industry experts must have over 7 years' experience working in the health insurance sector in Kenya so as to also speak of their experiences before and after implementation of strategic purchasing mechanisms.
<p><i>Note: The criterion was designed to enable selection of respondents who would provide significant insight and knowledge from their work experience in strategic purchasing.</i></p>

Four participants (two each from two private purchasers) were interviewed for Case 2. Table 4 below summarizes sources of interview and documentation (discussed further below) data for both cases.

Table 4 Outline of all the sources of data used in the study

A. Case study one (the NHIF-public purchaser)	B. Case Study two (Private purchasers)
<ul style="list-style-type: none"> 1) One interview with a Senior manager at the NHIF 2) Two interviews with provider managers 3) One interview with an industry expert 4) Nine online newspaper articles and publications [50-58]. 5) Standard contract between the NHIF and private providers [26] 6) Data from the NHIF website [59] 	<ul style="list-style-type: none"> 1) Four interviews with private purchaser staff 2) One interview with an industry expert 3) Two interviews with provider managers 4) Eight contracts used by various private purchasers to contract private providers [60-67] 5) Association of Kenyan Insurers (AKI) annual industry reports 2014[48]

Many challenges were faced during recruitment of interviewees for case one due to ongoing court cases related to the roll out of capitation by NHIF. Over a period of 15 months, 10 senior managers, 12 middle level managers and 18 senior staff and officers in the NHIF were approached directly and indirectly but only one senior manager agreed to the interview. Additional interviews were then sought comprising of three interviews with: one independent industry expert, and two provider manager running hospitals that had worked with the NHIF. Interviews were conducted between 2014 and 2017. The interviews were conducted between 2015 and 2016 by the principal researcher in English at the respondents' work places and lasted about an hour. In-depth interview format involving open ended questions was used. In-depth interviewing is a qualitative research technique comprising of intensive individual interviews [68] whereby an open-ended, discovery-oriented method is used allowing interviewers to deeply explore the feelings and perspectives of respondents on a subject [69].

In-depth interviewing is also most appropriate for situations whereby one wants to derive detailed information from a relatively small number of participants [68].

Additional documentation data was also collected (between 2015 and 2017) from: online sources, newspaper articles, standard contracts between the NHIF and private providers, and data from the NHIF website. Although concerns about possibilities of selection bias when researchers rely on newspaper data do exist, there are schools of thought that argue that newspaper data is not always critically flawed especially if rigorous ways are applied to correct the distortions that may arise from selection bias such as triangulation with other sources of data [70, 71]. Documentation in case study as a source of evidence is important in corroborating and augmenting interview data by serving as a form of triangulation [45, 46]. The rationale for selection of the various sources of data used to enrich interview data is outlined in Table 5 below.

Table 5 Overview of rationale for selection of various sources of documentation data

Documentation sources of data	Rationale for inclusion as a source of data
The NHIF website	The website included important information related to the national outpatient scheme such as details of the benefit package and communication to providers and the general public
Newspaper articles	The articles portrayed and captured various communications that happened between the NHIF and private providers on the role out of capitation from 2015 to 2017 These are in the form of reported articles by journalists and press statements made by the NHIF, private providers and other relevant stakeholders
Contracts	Sample contracts used by purchasers to contract private providers included details on contractual arrangements and obligations between the purchasers and private providers.

Data management and analysis

Interview data was transcribed, and the transcripts stored confidentially in password protected computers. Each case was analysed separately. For each case, data analysis was done using thematic content analysis which involved the following processes: familiarization

with the data; identification of codes and themes that had already been derived from the conceptual framework (a deductive matrix was constructed based on concepts in the conceptual framework and other literature) [72]; coding of the data; and organizing the codes and themes [70]. The last step involved organising data horizontally by codes, putting similar data together to build categories and finally looking at further relationship from the codes [70]. Document analysis was also used to supplement data from the interviews through a systematic process of reviewing printed and electronic documents to interpret meaning and develop empirical knowledge and as a means of triangulation [46]. The process included using the same themes used in analysis of the interview scripts and involved careful reading and re-reading of the data to identify patterns in the data [46]. Two distinct case reports were then generated.

Cross case analysis techniques used involved detailed descriptions of each of the two cases followed by comparative analysis across the two cases [73, 74]. Cross case analysis can be defined as a methodology that allows researchers to compare similarities and differences in events, activities and processes amongst separate case studies [75]. This involved comparing the pertinent themes and then merging the finds across the two cases [74, 75].

Results

This section includes description of the initial roll out of capitation by the NHIF and that of select purchasing mechanisms by private purchasers. Findings on the influence of different sources of power on the two implementation outcomes of interest (acceptability and adoption by providers) are discussed from the perspective of providers and purchasers.

The initial roll out of capitation by the NHIF

The NHIF gazetted and rolled out provision of outpatient care to all NHIF beneficiaries across the country in 2015 using capitation as a strategic purchasing mechanism [25]. Contracts from

2015 with the private contracted providers revealed that the capitation amount was capped at KES 1,200 (approx. USD 12) per annum per person paid out in four equal quarterly instalments [26]. Providers were expected to be chosen by a minimum of 30 enrollees and the benefit package included basic outpatient care similar to the Kenya Essential Package of Health (KEPH) [26, 58, 76]. The NHIF beneficiaries across the country were expected to enrol with any provider of their choice from a list of providers who had agreed to the terms of the NHIF outpatient capitation scheme [56]. There was nation wide publicity through various forms of media including newspapers on the various aspects of the rollout including: announcements of the accredited providers in a list provided on the NHIF website[59]; declaration by NHIF of the rates that providers would be paid[56]; and announcements of services covered by the scheme[26, 56, 58, 59]. Provider acceptability of capitation was mixed [54], as discussed later, but despite this, the NHIF was keen on ensuring that the model was adopted without any changes to its design and more so the capitation rate- the rates would later lead to controversy between the NHIF and some providers [53, 54, 56, 58].

There is evidence of some stakeholder engagement and discussions between the NHIF and some private providers prior and during implementation of the capitation model. Interviewees reported that the NHIF initiated dialogue by holding meetings with private provider representatives to introduce the capitation model. Meetings were in the form of half day workshops/seminars whereby the NHIF would make presentations and invite stakeholders to give feedback. During these forums the NHIF outlined how capitation would work and presented its advantages to providers. The NHIF also hoped to allay any fears that providers had as capitation was still new in Kenya as noted by the NHIF respondent.

“There were a series of very many meetings because at first it was a new concept, so they could not understand this issue of capitation and what capitation is all about. Because to them what they are used to is fee-for-service but now when you introduce a new system

of capitation, most of them were a bit hesitant- because they were asking 'Where has it worked? Where has this capitation, how sure are we, we are going to break even since we are going to make losses' So there were a series of very many meetings and engagements between NHIF and the service providers" (D001 page 2: Senior NHIF manager)

The NHIF tried to convince providers of the merits of capitation by explaining it would be better than FFS as it would lower administration costs for providers, and that providers who enrolled large numbers of beneficiaries would receive more money.

"I think the approach also helped because being, being a new concept and trying to explain to them [providers] the way we are going to reduce the claim process- the paper work. You know the fee-for-service involved a lot [of claim processes] but now since we are transferring the funds to them, they didn't have to now to claim the money from us and also the issue of the margins. If you have the numbers, chances are you going to make more money from capitation than from fee-for-service?" (D001 page 2: Senior NHIF manager).

The initial roll out of strategic purchasing mechanisms by private purchasers

Private purchasers implemented strategic purchasing mechanisms as part of normal business processes over the last five to ten years for cost control and quality assurance. Private purchasers hired staff including medical doctors and case managers to overcome information asymmetry – essentially to ensure that the purchaser had the best information available to make decisions about payment [23, 30]. Case managers (majority having nursing backgrounds) were the main link between providers and purchasers and oversaw preauthorization processes, initiated step-down processes and were responsible for seeking second opinions from specialist doctors whenever need arose. Case managers made hospital visits aimed at improving relations with the providers and as audit and quality assurance mechanisms.

Providers were frequently required to seek written approvals (preauthorizations) from purchasers when offering some services such as: inpatient admission, dental and optical

services. Case managers assessed and confirmed the need for the proposed interventions. The enforcement of the preauthorization processes was through detailed inclusion in the provider-purchaser contracts [60-67]. Purchasers used contracts to selectively accredit providers. The contracts were institution specific although there was significant uniformity across different purchasers [60-67].

In cases where the benefit package of a patient had been exhausted or would not be enough to cover continued admission in a given facility, the purchaser would recommend that the patient be transferred to a cheaper facility or risk having the patient or provider cover the cost of care. This intervention was referred to as *step-down*.

Implementation outcomes (acceptability and adoption) of strategic purchasing mechanisms

The study found mixed reactions by private providers to various mechanisms. Provider adoption and acceptance was largely driven by provider perception of potential financial gains or risks associated with a given mechanism. Providers viewed mechanisms perceived to be of economic value positively and negatively viewed those perceived to have potential economic risks.

Acceptability of the NHIF's capitation model

A provider manager noted that most of the large private hospitals perceived the proposed capitation rate of approximately USD 12 as too low and unsustainable. Similar sentiments were echoed by representatives of the provider association known as the Kenya Association of Private Hospitals (KAPH) who proposed a much higher capitation rate as noted by local press [58].

“Private hospitals led by Dr John Nyauma, the chairman of the Kenya Association of Private Hospitals (KAPH), a national association of medium and small private hospitals in Kenya, have in the past claimed that an independent study said to have been commissioned by the government and conducted by fund managers, Alexander Forbes, corroborated their claims that the current caps are not sufficient for effective healthcare for contributors.

They have insisted they would only consider implementing the plan if NHIF reviews the figure to at least Sh 6,000 with the ideal being Sh20,000 in line with the said study” [58].

A senior NHIF manager noted that provider dissatisfaction with the rates was a huge challenge to implementation.

“Uuumh the main challenge that we are facing, the amount we are capitating is still, is still not adequate as per the facilities” (D001, page 5: Senior NHIF Manager)

Private providers opposed to these rates used the press to express their disagreement and claimed that the NHIF had not conducted sufficient research when coming up with the rates [57, 58]. This was also reiterated by a provider manager.

“They have to do some market research actually and find out from the pharmaceutical companies what the selling rate of the drugs are. From the laboratory companies, what are their—then now you come up with some rates that are more or less in touch with how the market dynamics are. Because we purchase the drugs, we purchase the reagents, we have to pay the doctor, you know the doctor is not for free. So you have to factor all those things in as you’re pricing. Yeah”. (NWM001, page 5: Private Provider Manager).

Although the NHIF respondent noted that the NHIF had conducted some successful pilots that guided the determination of these rates, we could not source any publicly available documentation of these pilot study results.

Providers also felt that during meetings with the NHIF, there was very little room for negotiation and that the NHIF was forcing the rates on them.

“And the only problem with NHIF is they don’t listen to what people are saying...” (LHA001, page 2: Private Provider Manager).

Senior NHIF staff were however quoted by leading newspapers confirming that some providers were more open to trying the new rates [58]. These articles and interview data suggest that these providers felt that there was an opportunity to make a profit from the scheme by garnering large numbers of people allocated to them [53, 54, 58]. An industry expert also confirmed that some of the smaller facilities were open to this scheme despite the resistance by some of the larger providers.

“I think for the providers them, they.... remember the Mater hospital, the Aghakhan, the Nairobi Hospital the AARs did not participate, it’s the Meridian, the small groups who agreed to do it at a very low price point...” (IEM001, page 2: Health Industry Expert)

Adoption of the NHIF’s capitation model for provision of outpatient care

Provider adoption of the NHIF outpatient capitation scheme was varied. Some large providers such as Nairobi Hospital, Gertrude Children Hospital Aghakhan University Hospitals, Mater Hospital, and MP Shah Hospital amongst others resisted the scheme and staged a boycott to it as reported in various newspapers [51-54].

“Top private hospitals are missing from the list of providers that the National Hospital Insurance Fund (NHIF) published on Monday for its outpatient services, a pointer that they have failed to strike a deal with the public health purchaser” [52]

Top local newspapers showcased the conflict between the NHIF and KAPH whereby the NHIF insisted that the rates and the model were sustainable whilst the latter challenged this position [50-58]. Some providers whom the NHIF had listed as amongst those who chose to provide outpatient services under the NHIF capitation model scheme were also noted to have turned away patients seeking care from them under this scheme [53-55, 57]. It is unclear how providers who claimed not to have been part of the scheme had been listed as part of it. These newspaper articles from 2015 and 2016 reflect this.

“Mr John Nyaumah, the chairman of the Kenya Association of Private Hospitals, said the NHIF’s list of 1,500 private and public hospitals was not current and no negotiations were concluded with the private hospitals”[50]

“Private hospitals have been at loggerheads with the NHIF since July in what has seen them turn away patients seeking outpatient treatment under the State cover saying the Sh1,200 capitation per year is inadequate”[57].

Over time some providers who had initially rejected the scheme later adopted it. One of the provider managers interviewed confirmed that they had been hesitant to enrol but later

changed their mind and adopted the scheme when they realized they could capitalize on the huge volumes of clients the NHIF had. Interviews with the NHIF manager and industry expert further revealed that some of these providers hoped to make money from these patients from other services over and above the outpatient capitation scheme such as inpatient care.

Some of the providers who had adopted the capitation scheme earlier, later opted out of the outpatient capitation scheme but continued to work with the NHIF under other provider payment services such as provision of inpatient care under FFS. Termination of the NHIF capitation contract by providers was typically done in writing at the end of a given quarter [26].

The scheme thus emerged to have largely been accepted by some of the small and mid-sized providers and opposed by most of the large private providers. A section of providers who adopted the scheme have continued pushing for an increase in the rates as they felt that they were still quite low as noted by the NHIF manager. However, NHIF has not yielded to these efforts and rates had not been changed by 2018[37].

Acceptability and adoption of strategic purchasing mechanisms implemented by private purchasers

Private purchasers were also faced with mixed reactions from private providers during implementation. Mechanisms that were deemed beneficial by providers such as preauthorization processes and step-down were relatively well accepted and adopted and can be linked to financial considerations by providers. For example, some providers felt that the preauthorization process gave them an assurance that the purchaser would honour their bills. Similarly, some of the providers with relatively higher fees were co-operative with the step-down mechanism as they felt it minimized their risks of unpaid bills as the patients would

be transferred from them before they had exhausted their benefits as noted by a case manager.

“[step-down] is advantageous to the providers because it will save them the rejected costs at the end of the day or exceed benefits” (UAPJ002, page 9: Private purchaser case manager).

The use of second opinions was unfavourable as some providers felt that the insurer was intruding into their space as this was used by purchasers to confirm the necessity of high cost interventions proposed by providers. Providers contested this citing that it was likely to reduce their professional autonomy.

Providers disagreed to implementation of second opinions as they felt it (that these second opinions typically from third parties working on behalf of purchasers) may infringe on their professional work especially if the insurer was disagreeing with the treatment the provider was offering. (UAPJ001, page 3: Private Purchaser Case Manager)

In some instances, an intervention would have different perceptions amongst different providers. For example, one case manager felt that large providers in urban places found hospital visits more acceptable compared to smaller rural providers.

“Other places that are remote, because there are some places that we are not able to reach on a daily basis and maybe they are not used to insurers or the care managers frequenting, once we visit as an impromptu, it’s a surprise, it leaves them maybe worried, ‘is there something that they have come to find out, is there something that they maybe they are suspecting? ..But for, I can say in Nairobi, these other major towns, Mombasa, Eldoret, Kisumu, Nakuru, we are expected, actually when you don’t go, they even notice”. (CICM001, page 5: Private Purchaser Case Manager).

Use of preauthorization processes seemed to be the most widely adopted intervention. Case managers interviewed felt that most of the providers they worked with seemed to have complied with the preauthorization processes as spelt out in the purchaser-provider contracts.

“Most of the providers are cooperative and collaborate with the insurance staff as successful preauthorizations also provide them the assurance that their claims will be paid by the insurer” (UAPJ001, page 4: Private purchaser case manager)

However, there were still instances where some providers did not fully cooperate with the process and sought preauthorization from the purchaser based on incomplete or incorrect information.

“Because we have had [situations during preauthorization process] where doctors or hospitals tell you this is what it is, they tell you this is what is in the file but when they write a medical report, they bring something that is very different from what you saw or from what you talked [the final providers’ medical report contradicting the initial medical report]” (CICM001, Private purchaser Case Manager).

Overview of the role of power in implementation

Potential sources of power for purchasers include: institutional regulatory authority; prospective provider payment mechanisms; and monopsony and bargaining authority whilst for providers include: monopoly and bargaining capacity; retrospective provider payment mechanisms, and information asymmetry [2, 3, 7, 15, 42].

Sources of power for the NHIF

As the public institution mandated to design and implement social health insurance coverage for all Kenyans, the NHIF was able to use its regulatory authority to design and implement the capitation model and dictate the terms and conditions to providers by issuing a gazette notice [77]. Consequently, the NHIF presented non-negotiable rates to the private providers and despite significant resistance from some providers [51-58], the NHIF felt that it had regulatory and monopsony power over providers.

“I think the way it stands at now we still have the upper hand since aaaah most of them have tried to offer (resistance)..(D001, page 4: Senior NHIF Manager)

This was also confirmed by a different provider manager who informed that although the NHIF could not force private providers to adopt the capitation scheme, the NHIF used its monopsony to influence adoption.

They [the NHIF] can't force [providers] but they have the negotiating power because of the large number of people that they cover. So, as I told you, smaller facilities that depend mainly on NHIF are unable to sustain their business without NHIF coming on board. So, that is-- basically they have the carrot that they dangle for smaller facilities (LHA001, page 3: Private Provider Manager).

The NHIF's large pool of beneficiaries created a monopsony that enabled the NHIF to entice small and mid-sized providers to accept the rates as some of these providers found the volumes of potential business offered by the NHIF too attractive to ignore as confirmed by an industry expert.

"So, at the end of the day NHIF knows that they have the bigger purse, so they divide and rule. So, they get one, two, three facilities that accept, and what usually happens is, if the very few facilities accept, they have a higher number in terms of people allocated. (IEM003, page 2: Health Industry expert).

The NHIF also used capitation as a source of power as this prospective provider payment mechanism ensured the NHIF would determine the costs of care in advance. Capitation was hence used to shift the financial risk of providing care to the providers by the NHIF as the providers would only be paid by NHIF as per the total number of people enrolled and not by the quantity of services provided [7, 23, 26].

Sources of power for private purchasers

Contracts gave private purchasers the ability to control provider behaviours through inclusion of clauses supporting various mechanisms such as pre-authorization and hospital visits. [60-67]. Hiring case managers and medical specialists increased the bargaining capacity (a source of power) of private purchasers and reduced information asymmetry. Case managers were able to use their medical knowledge to validate provider interventions in relation to cost efficiency, quality of care and appropriateness. A case manager reflected on her role in overcoming information asymmetry when assessing length of stay after surgical operations.

"We [case managers] are guided a lot by our own experiences. You don't expect somebody going in with tonsils to stay seven days unless there is an underlying

problem, there is something else that's making them stay". (UAP1, page 4: Private Purchaser Case Manager)

Sources of power for private providers

Some of the large providers used their financial power (monopoly) to 'walk away' from the negotiations and boycott the NHIF capitation model. These providers had significant monopoly and bargaining capacity due to their size and market share.

"For bigger facilities, capitation does not work. They have refused and that is how it has remained. So NHIF cannot do anything, so they have to look for other facilities that are willing". (LHA001, page 3: Provider Manager)

These large providers also came together through their association to counter NHIF as mentioned earlier. This coming together likely increased the network power (which is "derived from collective knowledge, action and homophily") of the large providers [78], which would have increased the providers' bargaining capacity over the NHIF.

The number of established private providers was relatively few and composed of large providers who had hence had enough monopoly to dictate prices of their services in relation to private and public purchasers.

"We don't have many [providers]... in fact you can calculate the number of quality health care providers both inpatient and outpatient in Kenya. They are limited, you can count them! If you ask anyone 'where did you [if you are insured] where did you go?' They will tell you they went to 'this number 1, number 2 (provider)', there are few top health care providers! Which then makes them concentrate a lot of power. They have the upper hand in determining prices and relationships with the payers. So we know for sure that their relationship is one whereby the providers call the shots in the market" (IEM001, page 4: Industry Expert).

Some of the large providers also had a lot of clout and loyalty amongst patients which they used to increase their rates as noted by a case manager who reiterated an example of patients' feelings.

"My [referring to patient] mind is set. I can only be healed at (XYZ) hospital!" (UAPJ001,

Information asymmetry is a commonly known source of power for providers. Case managers were specifically introduced by purchasers to reduce information asymmetry. While the case manager mechanism was adopted by providers, information asymmetry still existed to some degree.

DISCUSSION

As per the conceptual framework a move from passive to strategic purchasing (from left to right) indicates that the risk of providing care is increasingly borne by providers. Using the modified conceptual framework (we added the concept of power), we had hypothesized that purchasers may use their various sources of power to promote/influence provider acceptability and adoption of strategic mechanisms that increasingly shift risk from purchasers to providers, whilst providers may also use their own sources of power to resist the adoption of mechanisms that shift the risk of providing care to them. This discussion section will reflect on this hypothesis using the findings presented above. The study found that purchasers in Kenya did use sources of power (regulatory authority, monopsony and provider payment mechanisms) to influence the acceptability and adoption of strategic purchasing mechanisms, however their power has limits as providers found some mechanisms unacceptable and resisted adoption, using their own source of provider power (monopoly and bargaining capacity, information asymmetry and provider payment mechanisms) to do so.

Public purchasers, private providers and power in implementation

Using institutional regulatory authority as a source of power, the NHIF as the public social insurer, was able to set the costs of care as part of the design of capitation as a strategic

purchasing mechanism. International literature shows that purchasers do use their regulatory authority to determine design aspects of various strategic purchasing mechanisms [78]. For example, in the Netherlands prices for primary care services are very tightly regulated by the purchaser as a cost control measure [78].

Capitation, a provider payment mechanism, is itself a source of power for purchasers frequently used to achieve cost management, equity and increase coverage [79]. It is thus important that it is accepted and adopted (implementation outcomes) by providers in order to reap these benefits from strategic purchasing. However, having the regulatory authority to design capitation models and set prices does not necessarily equal the power to influence the acceptability and adoption of capitation on the ground by providers. In Kenya some of the large providers found the capitation rate unacceptable and refused to adopt capitation.

The large private providers mentioned in the study used their monopoly power in the market to resist capitation as they are not reliant on the NHIF as a sole revenue source with private purchasers forming a significant share of their revenues. International examples also show that large providers are more likely to use monopoly to dictate prices to purchasers, as shown in the US [44, 80]

Using monopoly power, some of the large private providers in Kenya, were thus able to resist capitation and thus FFS is still highly prevalent in Kenya's private healthcare market. A recent study notes that private providers in Kenya are so powerful that NHIF is in a state of 'purchaser capture' whereby providers are able to influence FFS payment rates leading to inflated costs that threaten the NHIF's financial sustainability [25]. Recent studies in Kenya shows that NHIF is more able to control cost of care for services offered under capitation compared to services under FFS [23, 25].

Media can also be used for agenda setting, influencing public perceptions as well as

influencing policy outcomes [81]. Our study found that the larger providers also used the media as an additional source of power to express their resistance to the capitation model and showcase how unsustainable it was. The NHIF countered this by also using the media to justify the capitation rate by showing that many other providers had accepted it. Policy makers should thus be cognizant of the role of mass media and public perception has on interventions rolled out by public purchasers.

While the NHIF did not have much power to influence adoption by the larger private providers, the NHIF does have a huge number of beneficiaries listed with them, thus giving them access to monopsony power in the market. In this case study we found that the NHIF used this power to influence the acceptability and adoption of capitation by smaller providers who rely on the NHIF for the bulk of their revenue. Literature notes that large purchasers can use their size to take advantage of economies of scale and negotiate with providers from a strong position [82]. The smaller private providers in Kenya, who lack monopoly power, were more willing to engage with the NHIF and the capitation rate was more acceptable to them due to the prospect of future economic gains from the capitation model. Such economic prospects are also noted in various studies such as in Ghana where providers viewed capitation positively due to fact that they received payments before offering care [83] and in Thailand where providers anticipated to enrol more people and hence generate more revenues [84].

International literature notes that when faced with a surplus of choice of providers to work with, purchasers will select those who they are able to negotiate or agree with and may even adopt a take-it or leave it approach to the provider[85] as is the case with the NHIF's implementation of capitation.

Private purchasers, private providers and power in implementation

In response to information asymmetry in the Kenyan healthcare market, *private purchasers* introduced various strategic purchasing mechanisms, including hiring staff with medical knowledge to intervene in clinical decision-making, use of pre-authorization processes and implementation of step-down measures. Their main source of power was found to be their bargaining authority, as expressed by the fact that they controlled the design of contracts that documented the strategic purchasing mechanisms that would be put in place. They were thus freely able to include these strategic purchasing mechanisms in contracts and private providers had to adopt these mechanisms as they had signed the contract. Literature notes that purchasers frequently use contracts to gain power over providers [7] and that contracts are more impactful whereby purchasers can select from competing providers [86]. Despite the existence of contracts, the balance of power can still frequently favour large providers over purchasers especially where provider monopoly exists [86]. Contracts thus do have limits in terms of influencing the acceptability and adoption of reforms.

Even though all the strategic purchasing mechanisms implemented by private purchasers shifted risk to private providers, some were deemed more acceptable than others and willingly adopted by providers and providers therefore did not demonstrate explicit exercises of power when this happened. For example, *pre-authorization* gave the providers an assurance of payment whilst *step-down* reduced the risks of unpaid claims.

Private providers did however resist two other mechanisms. Some evidence in our case indicated that private providers resisted full adoption of medical intervention in clinical decision-making, they resisted by not disclosing all relevant information when requested by the purchaser in relation to clinical decisions – thus providers used information asymmetry as a source of power and resistance. In relation to case managers, staff from some rural and small private providers often took long periods of time to deal with requests for information

especially during hospital visits thus showing resistance to full adoption

Results from both cases underline the fact that power plays an important role in implementation [87]. Data from both cases demonstrates that while the use of regulatory authority and contracts may be powerful when designing strategic purchasing mechanisms, ultimately the adoption thereof can be countered by providers who also have power in the market to resist mechanisms they find unacceptable.

Literature notes that private and public providers in Kenya generally feel that the NHIF has still not held enough dialogue and gotten consensus with them especially on the NHIF capitation rates[36, 83]. In Ghana providers felt that they lacked a say on the implementation of strategic purchasing mechanisms by the public social health insurer and that further[83], there was breakdown in communication between providers and the purchaser[88]. There is limited emphasis in consensus building and dialogue amongst the private purchasers and private providers in the second case. This could be as a result of the fact that private purchasers engage providers on an individual basis when contracting them as opposed to a group as seen with the NHIF. This seems to be less '*messy*' and tedious in comparison to the experience of the NHIF and providers.

It is important to note that during implementation of strategic purchasing within a health system, the government's involvement is imperative to balance the various actors' different interests and to promote proper provision of well-coordinated services in line with the population needs [89]. This stewardship role of government involves guiding the entire health system along policies as ultimately it is good policy making, governance and management that will ensure purchasing decisions are aligned to the population needs [89]. For example, recent evidence from the Philippines shows that where government's role of stewardship is not fully exercised this can lead to situations whereby purchasers attempt to fill the void

through *self-stewardship* which is undesirable as the principal agent relationship between government and purchaser is then weakened [90].

Additionally, similar to a study focussed on improving strategic purchasing in Indonesia, purchasers and policy makers in Kenya should explore ways to modify pricing negotiation mechanisms with both private and public hospitals; strengthen the monitoring and performance evaluation of contracted hospitals; and provide favourable policies to support performance improvement of both private and public hospitals [90].

Dialogue, consensus building and the role of the media as influences in implementation are not included in the modified conceptual framework, we find however that these three items can potentially play an important role in the development of strategic purchasing mechanisms, the communication of information around strategic purchasing mechanisms potentially leading to less resistance in the adoption of strategic purchasing mechanisms. Public purchasers and policy makers hence need to ensure the following are carried out during implementation: careful preparations; extensive stakeholder engagement; but nonetheless expect multiple challenges [91].

Limitations of the research

A purposive sample that included a wider range of interviewees and stakeholders would have yielded greater insights on this study; a longitudinal approach would have also provided more nuances. Nonetheless, this study serves as a starting point in thinking about the implementation of strategic purchasing mechanisms in Kenya. Only a few interviews were conducted despite efforts to include more participants from the NHIF. However, we are of the view that after triangulation with data from newspaper articles, contracts and other documents, a reasonable amount of validity was achieved. There was also high level of consistency between data from the interviews and that from documentation.

Conclusion

Countries striving to achieve UHC will need to implement health financing reforms that place emphasis on shifting from passive to strategic purchasing mechanisms. Although purchasing reforms cannot be done in isolation of other health systems and health financing reforms, the purchasing functions still deserves special focus. Findings from the study demonstrate the critical need for policy makers to apply stakeholder analysis approaches prior to implementing strategic purchasing mechanisms to enhance the political viability of these mechanisms. Stakeholder analysis should include an understanding of the various stakeholders such as providers and purchasers including their powers and interests in relation to the strategic purchasing mechanisms [92]

Private providers have significant sources of power such as monopoly that they use to resist implementation of mechanisms that they perceive erode their economic gains. Private purchasers in Kenya will need to explore ways of countering the prevailing sources of power of some private providers.

Although the NHIF also yielded significant power over some private providers during implementation of capitation, there may have been less resistance from some providers had mechanisms for enabling more extensive dialogue and consensus building with providers been put in place.

We recommend further research that is aimed at shedding more insights on how policy makers and purchasers in Kenya can roll out strategic purchasing mechanisms using processes that are responsive and adaptive to the influence of sources of power for both providers and purchasers.

List of abbreviations

DRGs Diagnostic Related Groupings

FFS Fee-for-service

NHIF National Hospital Insurance Fund

SDG Sustainable Development Goal

KAPH Kenya Association of Private Insurers

UHC Universal Health Coverage

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the University of Cape Town Faculty of Health Sciences Human Research Ethics Committee Reference No. HREC050/2014 and from the Kenyatta National Hospital/University of Nairobi Ethics Research Committee Reference No. KNH-ERC/RR/356

Consent for publication

Not available

Availability of data and material

The interview scripts and some of the documents analysed during the study are not publicly available as data may contain information that could compromise the research participants' privacy and consent

Competing interests

The author declares that they have no competing interests.

Funding

Not applicable

Authors' contributions

All interviews were conducted by the author. Data analysis was done manually with excel. Analysis and framing was done by the author. The author has read and approved the final manuscript.

Acknowledgements

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Authors' information (optional)

Not applicable

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1. APPENDICES

Appendix 1 Overview of study population (registered health insurance firm in Kenya and their market share by gross medical premium in 2014 [48])

	Company Name	Gross Medical premiums
1	Jubilee	5,023,079,580.00
2	AAR	3,494,335,863.00
3	CIC General	3,083,556,000.00
4	UAP General	2,950,268,000.00
5	Resolution	2,479,608,000.00
6	APA	2,380,217,000.00
7	Heritage	1,250,751,000.00
8	Britam	1,127,961,000.00
9	First Assurance	899,520,000.00
10	GA	863,519,000.00
11	Britam General	608,928,000.00
12	Madison	465,628,000.00
13	Gateway	211,293,475.00
14	ICEA LION	150,975,000.00
15	Saham	122,392,000.00
16	Pacis	105,967,000.00
17	Kenindia	92,201,000.00

Research Questionnaire - NHIF

1. How long have you worked in health financing and health insurance in the country?
2. How long have you worked at NHIF and what is your current role at NHIF as regards to health care financing?
3. Are you involved in the roll out of the new capitation model? Could you describe your involvement so far?
4. Please describe the capitation model as applied by the NHIF to implement its outpatient scheme?
5. How was the model rolled out amongst the private providers? (Was there any consultation, price and rates negotiation, prior agreement on provider selection and contracting terms etc.?)
6. What were the initial reactions from providers to the way the capitation model was rolled out? Are there any experiences from initial engagements such as first meetings, feedback from providers?
7. Were there any elements of the roll out they were disagreeable on? Please explain.
8. How did private providers express any such disagreement?
9. Did the NHIF have any power to enforce/promote their terms and protect its interests in cases where providers were not fully agreeable?
10. Please explain in detail sources of such power and how they were used by the NHIF
11. Did private providers have any powers to resist the NHIF capitation terms and promote their interests regarding any aspects they were not agreeable with?

12. Please explain in detail sources of such power and how they were used by private providers to modify or resist aspects of the capitation model that they were not fully agreeable with?
13. Could you describe the main successes of the roll out this far?
14. Could you describe the main challenges of the roll out so far?
15. What do you think will happen in the future? Why do you think this?
16. Is there anything else you think I may have missed that is relevant to our discussion that you'd like to add?

THANK YOU FOR YOUR TIME!!!

Research Questionnaire - PRIVATE PURCHASERS

- 1) How long have you worked in health financing and health insurance in the country?
- 2) What is your current/main role at this institution as regards to health insurance?
- 3) Does your institution intervene in clinical decision-making processes in the management of inpatient medical schemes? If so, please list the various methods used and your involvement.
- 4) Please describe each of the interventions above in detail. Explain how and when they were rolled out.
- 5) What are the objectives of each of the methods and how successful have they been in achieving them?
- 6) What were the initial reactions from providers to the use of these interventions? Are there any experiences from initial engagements such as first meetings, feedback from providers?
- 7) Were there any elements of these interventions that providers were disagreeable on? Please explain.
- 8) How did private providers express any such disagreement?
- 9) Did your firm have any power to enforce/promote these interventions protect your interests in cases where providers were not fully agreeable?
- 10) Please explain in detail sources of such power and how you used them
- 11) Did private providers have any power to resist full implementation of the interventions or that prevented the interventions achieving their full objectives?

- 12) Please explain in detail sources of such power and how they were used by private providers to protect their interests or modify/resist aspects of the interventions that they were not fully agreeable with?
- 13) Could you describe the main successes of the interventions so far?
- 14) Could you describe the main challenges of the roll out so far?
- 15) What do you think will happen in the future? Why do you think this?
- 16) Is there anything else you think I may have missed that is relevant to our discussion that you'd like to add?

THANK YOU FOR YOUR TIME!!!

Justification for inclusion of press releases and other sources of data

The objective of this research was to document experiences of both private and public purchasers in introduction, roll out and implementation of strategic purchasing mechanisms in Kenya amongst private health providers. The mainstay of data collection would be conducting face- to-face in-depth interviews with key respondents from public and private purchasers. This comprised of about 4 interviewees from two private insurance companies and 4 interviews from the NHIF- the main public purchaser in Kenya. Two strategic purchasing mechanisms were identified for research as follows: intervening in clinical decision-making processes in management of inpatient medical cover by private insurers; and introduction and roll out of capitation to provide outpatient medical cover by the NHIF. Ethics approval was gotten from the University of Cape Town, S. Africa.

Data collection amongst the private insurers progressed as planned with minimal delays with the four interviews planned and conducted within three months after ethics approval. However, there were significant delays with access to respondents working in the NHIF. The researcher initially tried getting institutional approval from management of the NHIF through contacting the CEO's office but there was no response. Eventually there was verbal communication that different the NHIF staff could participate but with approval from their senior managers. The processes of getting approval to conduct interviews then involved contacting different senior managers within the organization through telephone calls, emails, and conducting face-to-face meetings. As most senior NHIF managers were frequently busy with office work or on travel, a typical appointment would take about two months before getting consent for a face to face meeting to have a discussion about the

study. In total, six senior managers and multiple other officers were contacted by the lead researcher with all declining to take part in the interview apart from one senior manager. Their main reason was that there was a lot of controversy regarding the capitation issue that included even on-going court cases. Effort by the lead researcher to allay any fears of identification of respondents as well as their freedom to decline to answer questions they were not comfortable with were not successful. Disclosure that recording of the interview was also a critical part of data collection also discouraged many potential interviewees. In total, about eight months were lost in trying to seek interviews with NHIF respondents which resulted in only one senior manager being willing to take part. Efforts to request interviews with other NHIF staff did not also bear any fruits.

After various consultations it was deemed prudent to look for other additional sources of data to complement existing data on the implementation of capitation by the NHIF. This was done through a search and review of online materials on the NHIF's capitation initiative. Majority of the materials that emerged was made up of newspaper articles and reports. These were as a result of various stakeholders such as the NHIF and private providers calling press conferences on the topic as the roll out of capitation by the NHIF was an issue that received a lot of media coverage and attention. Efforts were ensured that only mainstream news publishers that had developed credibility over the years were included. There was also an effort to triangulate information from different news publishers. In addition, available press releases and reports from the stakeholders were also reviewed. Opinion articles were largely avoided with emphasis laid mainly on articles resulting from press releases, press conferences or press interviews by various stakeholders. These online



materials and in a particular online news articles were quite helpful in shedding more light on the reactions of private providers and the NHIF management during the roll out of capitation scheme. They were thus important sources of data more so in the absence of multiple NHIF interviews as well as providing an unbiased reporting perspective.

Another source of data used was contracts between the NHIF and providers. These were quite detailed and helped to corroborate some of the facts raised gotten from the interviews and newspaper articles.

PART D:

APPENDICES

Appendix 1: Ethics approval and renewal

	<p>UNIVERSITY OF CAPE TOWN Faculty of Health Sciences Human Research Ethics Committee</p>	
		<p>Room E52-24 Old Main Building Groote Schuur Hospital Observatory 7925 Telephone [021] 406 6492 • Facsimile [021] 406 6411 Email: Sumayah.ariel@uct.ac.za Website: www.health.uct.ac.za/research/humanethics/forms</p>
<hr/>		
<p>11 April 2014</p>		
<p>HREC/REF: 050/2014</p>		
<p>Ms V Govender Public Health & Family Medicine Health Economics Unit Falmouth Building, FHS</p>		
<p>Dear Ms Govender</p>		
<p>Project Title: ACTIVE PURCHASING MECHANISMS OF PRIVATE HEALTHCARE SERVICES: EXPERIENCES OF PUBLIC AND PRIVATE PURCHASERS IN KENYA-Master-B Chuma</p>		
<p>Thank you for your letter dated 25 March 2014, addressing the issues raised by the Human Research Ethics Committee.</p>		
<p>It is a pleasure to inform you that the HREC has formally approved the above mentioned study.</p>		
<p>Approval is granted for one year until the 30 April 2015.</p>		
<p>Please submit a progress form, using the standardised Annual Report Form, if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.</p>		
<p><i>We acknowledge that the following students:- Benson Chuma is also involved in this study.</i></p>		
<p>Please note that the on-going ethical conduct of the study remains the responsibility of the principal investigator</p>		
<p>Please quote the HREC REF in all your correspondence.</p>		
<p>Yours sincerely</p>		
<p>Signature Removed</p>		
<p>PROFESSOR M BLOCKMAN CHAIRPERSON, HSF HUMAN ETHICS</p>		
<p>Federal Wide Assurance Number: FWA00001637.</p>		
<p>Hrec/ref:050/2014</p>		



FHS016: Annual Progress Report / Renewal

HREC office use only (FWA00001637; IRB00001938)			
This serves as notification of annual approval, including any documentation described below.			
<input checked="" type="checkbox"/> Approved	Annual progress report	Approved until/next renewal date	30/01/2020
<input type="checkbox"/> Not approved	See attached comments		
Signature Chairperson of the HREC		Date Signed	28/1/2019

Signature Removed

Comments to PI from the HREC
<p><i>Please see the deviation document</i></p>

Principal Investigator to complete the following:

1. Protocol Information

Date (when submitting this form)	22 nd October 2018		
HREC REF Number	HREC/REF:050/2014	Current Ethics Approval was granted until	Nov 2016
Protocol title	Active purchasing mechanisms of private healthcare services: experiences of public and private purchasers in Kenya (Masters thesis)		
Protocol number (if applicable)			
Are there any sub-studies linked to this study?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, could you please provide the HREC Ref's for all sub-studies? Note: A separate FHS016 must be submitted for each sub-study.			
Principal Investigator	Marsha Orgill (Masters supervisor)		
Department / Office Internal Mail Address	Ms.orgill@uct.ac.za		

**HUMAN RESEARCH
ETHICS COMMITTEE**

12 March 2018

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28 JAN 2019

FHS016

(Note: Please complete the Closure form (FHS010) if the study is completed within the approval period.)

HEALTH SCIENCES FACULTY
UNIVERSITY OF CAPE TOWN

APPENDIX 2: Instructions to Authors

International Journal for Equity in Health instructions to authors

Preparing your manuscript

The information below details the section headings that you should include in your manuscript and what information should be within each section.

Please note that your manuscript must include a 'Declarations' section including all of the subheadings (please see below for more information).

Title page

The title page should:

- present a title that includes, if appropriate, the study design e.g.:
 - "A versus B in the treatment of C: a randomized controlled trial", "X is a risk factor for Y: a case control study", "What is the impact of factor X on subject Y: A systematic review"
 - or for non-clinical or non-research studies a description of what the article reports
- list the full names, institutional addresses and email addresses for all authors
 - if a collaboration group should be listed as an author, please list the Group name as an author. If you would like the names of the individual members of the Group to be searchable through their individual PubMed records, please include this information in the "Acknowledgements" section in accordance with the instructions below
- indicate the corresponding author

Abstract

The Abstract should not exceed 350 words. Please minimize the use of abbreviations and do not cite references in the abstract. Reports of randomized controlled trials should follow the CONSORT extension for abstracts. The abstract must include the following separate sections:

- **Background:** the context and purpose of the study
- **Methods:** how the study was performed and statistical tests used
- **Results:** the main findings
- **Conclusions:** brief summary and potential implications
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Keywords

Three to ten keywords representing the main content of the article.

Background

The Background section should explain the background to the study, its aims, a summary of the existing literature and why this study was necessary or its contribution to the field.

Methods

The methods section should include:

- the aim, design and setting of the study
- the characteristics of participants or description of materials
- a clear description of all processes, interventions and comparisons. Generic drug names should generally be used. When proprietary brands are used in research, include the brand names in parentheses
- the type of statistical analysis used, including a power calculation if appropriate

Results

This should include the findings of the study including, if appropriate, results of statistical analysis which must be included either in the text or as tables and figures.

Discussion

This section should discuss the implications of the findings in context of existing research and highlight limitations of the study.

Conclusions

This should state clearly the main conclusions and provide an explanation of the importance and relevance of the study reported.

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If abbreviations are used in the text they should be defined in the text at first use, and a list of abbreviations should be provided.

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All manuscripts must contain the following sections under the heading 'Declarations':

- Ethics approval and consent to participate
- Consent for publication

- Availability of data and material
- Competing interests
- Funding
- Authors' contributions
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Please see below for details on the information to be included in these sections.

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Manuscripts reporting studies involving human participants, human data or human tissue must:

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- include the name of the ethics committee that approved the study and the committee's reference number if appropriate

Studies involving animals must include a statement on ethics approval.

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Consent for publication

If your manuscript contains any individual person's data in any form (including any individual details, images or videos), consent for publication must be obtained from that person, or in the case of children, their parent or legal guardian. All presentations of case reports must have consent for publication.

You can use your institutional consent form or our [consent forms](#) if you prefer. You should not send the form to us on submission, but we may request to see a copy at any stage (including after publication).

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All manuscripts must include an 'Availability of data and materials' statement. Data availability statements should include information on where data supporting the results reported in the article can be found including, where applicable, hyperlinks to publicly archived datasets analysed or generated during the study. By data we mean the minimal dataset that would be necessary to interpret, replicate and build upon the findings reported in the article. We recognise it is not always possible to share research data publicly, for instance when individual privacy could be compromised, and in such instances data availability should still be stated in the manuscript along with any conditions for access.

Data availability statements can take one of the following forms (or a combination of more than one if required for multiple datasets):

- The datasets generated and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS]
- The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.
- All data generated or analysed during this study are included in this published article [and its supplementary information files].
- The datasets generated and/or analysed during the current study are not publicly available due [REASON WHY DATA ARE NOT PUBLIC] but are available from the corresponding author on reasonable request.
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The datasets generated during and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS].^[Reference number]

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Acknowledgements

Please acknowledge anyone who contributed towards the article who does not meet the criteria for authorship including anyone who provided professional writing services or materials.

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Slifka MK, Whitton JL. Clinical implications of dysregulated cytokine production. Dig J Mol Med. 2000; doi:10.1007/s801090000086.

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Book chapter, or an article within a book

Wyllie AH, Kerr JFR, Currie AR. Cell death: the significance of apoptosis. In: Bourne GH, Danielli JF, Jeon KW, editors. International review of cytology. London: Academic; 1980. p. 251-306.

OnlineFirst chapter in a series (without a volume designation but with a DOI)

Saito Y, Hyuga H. Rate equation approaches to amplification of enantiomeric excess and chiral symmetry breaking. Top Curr Chem. 2007. doi:10.1007/128_2006_108.

Complete book, authored

Blenkinsopp A, Paxton P. Symptoms in the pharmacy: a guide to the management of common illness. 3rd ed. Oxford: Blackwell Science; 1998.

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Organization site

ISSN International Centre: The ISSN register. <http://www.issn.org> (2006). Accessed 20 Feb 2007.

Dataset with persistent identifier

Zheng L-Y, Guo X-S, He B, Sun L-J, Peng Y, Dong S-S, et al. Genome data from sweet and grain sorghum (*Sorghum bicolor*). GigaScience Database. 2011. <http://dx.doi.org/10.5524/100012>.

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PART E:

POLICY BRIEF

This policy brief was prepared by Dr. Benson Chuma as part of a dissertation for a Master of Public Health degree at the School of Public Health & Family Medicine of the University of Cape Town.

Lessons from the implementation of strategic purchasing in Kenya

Provider and purchaser power play crucial roles in implementation of strategic purchasing

INTRODUCTION

Kenya has made bold declarations aimed at achieving UHC (Universal Health Coverage) by the year 2022 as part of a four-pronged approach for economic development dubbed as the 'BIG FOUR' (Government of Kenya, 2018). Kenya, like other countries striving to achieve UHC, cannot achieve this goal without efforts to promote efficiency from the limited resources available for health (Kutzin, 2001).

A good starting point for such efforts is making deliberate efforts to shift from *passive* to *strategic* purchasing of healthcare services.

Purchasing is defined as the allocation of pooled funds to providers in exchange for medical services on behalf of a population and can be *passive* (whereby purchasers simply pay bills presented by providers) or *strategic* (where purchasers

continuously apply evidenced based decisions and processes aimed at achieving set goals and outcomes) (Honda, 2014). When implemented correctly, strategic purchasing can allow policy makers to align utilization of health budgets to the needs of citizens.

This study explored efforts to implement strategic purchasing mechanisms (shown in Figure 1 and 2) in private provider facilities by (1) the public purchaser- the National Health Insurance Fund (NHIF) and (2) private purchasers in Kenya.

Figure 1 Example of strategic purchasing (use of capitation) introduced in Kenya by the Public Purchaser (NHIF) in 2015 to roll out outpatient care for all beneficiaries countrywide

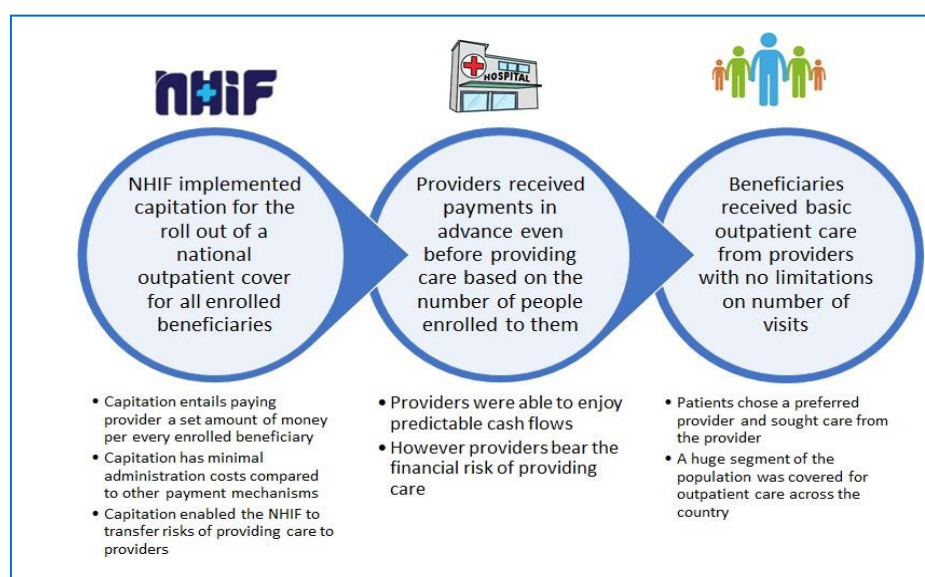




Figure 2 Examples of strategic purchasing mechanisms introduced in Kenya by private purchasers over the last ten years amongst private providers

		
	Private purchasers	Private providers
Pre-authorization	<ul style="list-style-type: none"> Mechanisms used by private purchasers to pre approve Allowed purchasers to predict and control costs of care 	<ul style="list-style-type: none"> Increased provider accountability Assured providers of purchasers willingness to pay for approved care
Selective contracting	<ul style="list-style-type: none"> Purchasers selectively accredited and contracted providers Purchasers included various strategic purchasing mechanisms within the contracts to increase authority over providers 	<ul style="list-style-type: none"> Providers were bound by the terms and conditions spelt out in the contracts
Hiring staff with medical backgrounds	<ul style="list-style-type: none"> Purchasers hired staff with medical backgrounds such as nurses (majority of the case managers) and medical doctors Served as the interphase between providers and purchasers and enabled purchasers to overcome information asymmetry Implemented most of the strategic purchasing mechanisms 	<ul style="list-style-type: none"> Main contact point for providers with the purchasers Providers were expected to cooperate with the case managers
Intervening in clinical decision making	<ul style="list-style-type: none"> Case managers intervened in clinical decision making processes such as through pre-authorizations, seeking second opinions and making hospital visits These were meant to control costs and as quality assurance mechanisms 	<ul style="list-style-type: none"> Providers had to comply with these processes although some felt they were infringing on their autonomy
Step Down	<ul style="list-style-type: none"> Process whereby the purchaser would recommend transfer of a patient from a higher cost hospital to a lower cost hospital for patients who were likely to exhaust their benefits Example include patients who were stable after surgery but needed some time to recover or chronically ill patients 	<ul style="list-style-type: none"> Large providers preferred this as it minimized their risk of incurring costs of care that were beyond the patients benefit package and hence not covered by the purchaser

introduction of strategic purchasing introduces new power balances and “responses might be positive or negative depending on whether providers see the introduction of strategic purchasing as an opportunity or a

Implementation of strategic purchasing mechanisms is however not a straight forward process and may run into contestation between purchasers and providers as purchasers try and shift the risk of providing care to providers as well as try and mitigate the effects of information asymmetry. Providers may find the strategic purchasing mechanism unacceptable¹ and resist adoption² in several ways. Busse et al. (2007) note that the

threat”(Busse et al., 2007). Power is a relational concept and exists between two parties.

Purchasers and providers have access to a variety of sources of power depending on the market structure and may use these sources of power (see figures 3 and 4 below) to either enable or disable the implementation of strategic purchasing mechanisms.

¹ Acceptability can be defined as the perceptions among private providers of the strategic purchasing mechanisms and the extent to which these mechanisms are agreeable to them

² Adoption is defined as the intentions, initial decisions, and actions of private providers towards implementation of strategic purchasing mechanisms

Fig. 3 Sources of power for purchasers (Kirkwood, 2016, Pauly, 1998, Scheffler & Arnold, 2017)

Institutional regulatory authority	Provider payment mechanisms	Monopsony and bargaining authority
<ul style="list-style-type: none"> • Institutional regulatory authority and high bargaining authority give purchasers power to dictate to providers about quantity, quality, and availability of care that's purchased and provided • Purchaser then have power to set and enforce the rules of the game and have the responsibility of providing strategic direction for all the different actors involved 	<ul style="list-style-type: none"> • Prospective payment mechanisms such as capitation mean payment rates are predetermined before care is provided • Purchasers are hence able control costs of care and shift the financial risks of providing care to providers 	<ul style="list-style-type: none"> • Purchasers have market monopsony power in a market where they are the only buyer in a market with multiple competing providers • Purchasers are then able to use their financial power to ensure that service delivery occurs in line with the objectives of efficiency and high quality

The knowledge base on strategic purchasing in

Fig. 4 Sources of power for providers (Kirkwood, 2016, Kutzin, 2001, Melnick, Keeler & Zwanziger, 1999, Pauly, 1998)

Monopoly and bargaining capacity	Provider payment mechanisms	Information asymmetry
<ul style="list-style-type: none"> • Providers are said to have market monopoly and hence higher bargaining capacity when there are few health providers controlling a significant market share • This gives providers power to dictate prices and influence decision making in relation to cost, quality of care and type and quantity of interventions to be provided in relation to purchaser 	<ul style="list-style-type: none"> • Retrospective payment mechanisms like Fee-For-Service mean that payment rates and cost of care is determined after providers have offered care • This gives providers power to dictate costs of care and leaves the purchaser exposed to the financial risks of providing care 	<ul style="list-style-type: none"> • Providers are said to use information asymmetry as a source of power when they take advantage of having more or better information than purchasers • This gives providers power to influence consumer demand for health care and to circumvent regulations set by purchasers to control costs and provider behaviours.

Kenya is growing³ but there is certainly scope for implementation research. Kenya has in the past decade formulated and sought to implement several strategic purchasing mechanisms amongst

³ Recent research in Kenya is increasingly shedding light on processes related to strategic purchasing, resources include (Barasa, E., Nguhiu & McIntyre, 2018, Barasa, Edwine et al., 2018, Kazungu et al., 2018, Mbau et al.,

private providers. Private providers in Kenya play a significant role in provision of care and over 40% of facilities in Kenya are privately owned.

METHODOLOGY

We used a multiple case study approach with two cases:

1. implementation of capitation by the NHIF in the roll out of outpatient medical cover for all beneficiaries in the country in private provider facilities
2. implementation of select strategic purchasing mechanisms by private purchasers including intervening in clinical decision-making processes, use of preauthorization, hiring staff with medical knowledge and step-down procedure.

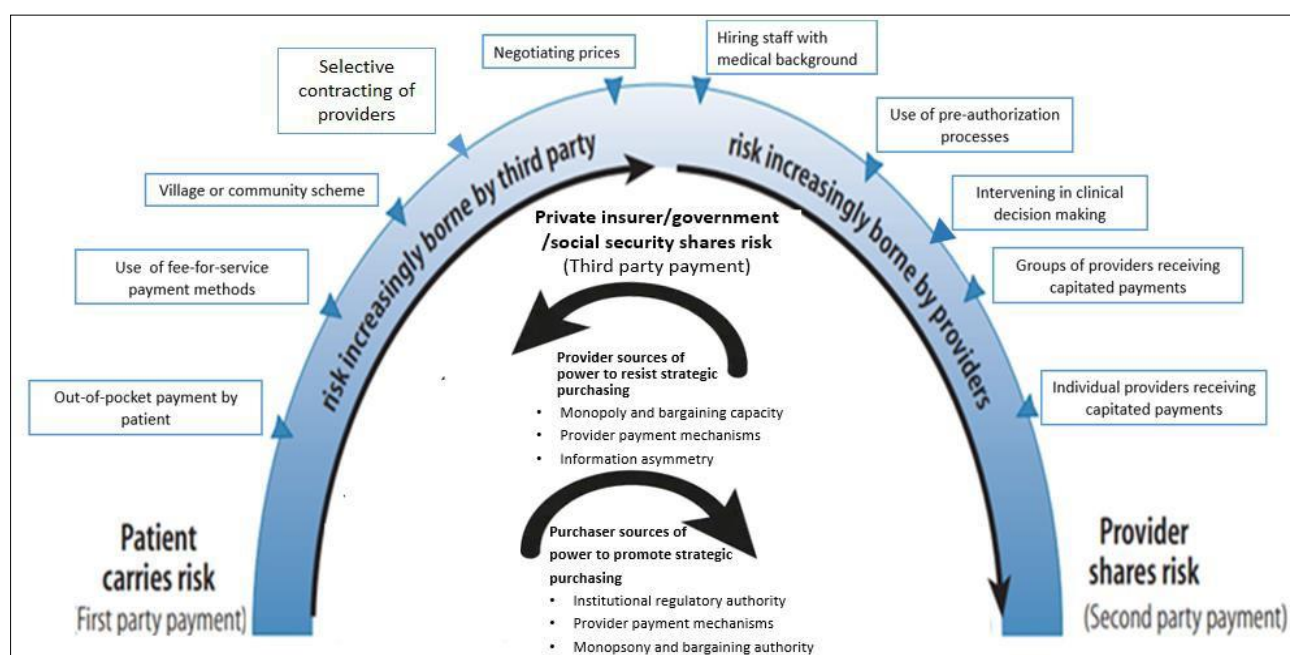
We used a conceptual framework (figure 5 below) based on the theory that as purchasers roll out new strategic purchasing mechanisms (as you move from left to right of the diagram), the financial risk

2018, McCollum et al., 2018, Munge, Mulupi & Chuma, 2015, Nyikuri et al., 2015, Obadha et al., 2018, RESYST, 2019)

of providing care continuously shifts from purchasers to providers (Figueras, Robinson & Jakubowski, 2005, Preker & Langenbrunner, 2005). Sources of data included eight in-depth interviews

with purchasers, providers and industry experts and documentary data comprised of provider-purchaser contracts, grey literature and reports found on relevant Kenyan websites and newspaper articles.

Figure 5 Conceptual framework showing purchasers use of power to promote implementation of strategic purchasing and providers use of power to resist implementation



FINDINGS

Case one: implementation of capitation to roll out outpatient care by the NHIF

In the first case, the NHIF used its regulatory authority in Kenya (a source of power) to design the capitation model which included a capitation rate that many large providers found unacceptable, they were able to do this despite continued resistance from some of the large private providers. However,

having the regulatory authority to design capitation models and set prices does not necessarily equal the power to influence the acceptability and adoption of capitation on the ground by providers. Some providers felt there was minimal dialogue and consensus building between providers and the NHIF around the model - these providers, through the Kenya Association of Private Hospitals, used the media to express their dissatisfaction with the NHIF model. The NHIF also used the media and attempted to counter these claims by illustrating

that multiple private providers had decided to adopt the model. Ultimately, some of the large private providers used their monopoly power and bargaining capacity to walk away from the model as they still commanded significant market share even without the NHIF capitation business.

The NHIF does still however have some monopsony power in the market – they were thus able to convince some private providers, especially small and mid-sized ones, that there would be significant economic gains for them from the capitation model due to the huge number of beneficiaries that the NHIF covered.

To date some providers especially the large ones have resisted adoption of the capitation model. Some of the private providers that did enrol with the capitation model do also complain that the rates are too low and that the model lacks proper processes for them to provide feedback on their experiences (Obadha et al., 2018, Sieverding, Onyango & Suchman, 2018).

The capitation rate as well as the process of stakeholder engagement was found to be unacceptable by some of the large providers and this ultimately affected the adoption of the

capitation model. For smaller providers, the prospects of economic gains from the huge NHIF beneficiary list did however promote adoption.

Case two: implementation of various strategic purchasing mechanisms by private purchasers

Private purchasers in Kenya are faced with multiple challenges such as existence of information asymmetry between them and private providers, and the use of fee-for-service as the main provider payment mechanism. The challenges have led to private purchasers implementing the strategic purchasing mechanisms shown in Figure 2 as a way of controlling costs of care and ensuring quality of care. Private purchasers used bargaining authority derived from contracts as a source of power to give them some authority over providers by embedding the strategic purchasing mechanisms within these contracts in order to ensure private providers adopted these mechanisms. Providers did willingly adopt mechanisms they felt had economic benefits (it was thus acceptable to them), such as use of preauthorization processes which gave them assurance that purchasers would pay their claims and use of step-down facilities which they felt minimized the risk of unpaid claims.

Private providers did however show some resistance to full adoption of purchaser intervention in clinical decision-making, an interviewee indicated they resisted by not disclosing all relevant information when requested by the purchaser in relation to clinical decisions – thus providers used information asymmetry as a source of power and resistance. In relation to case managers, staff from some rural and small private providers often took long periods of time to deal with requests for information especially during hospital visits thus showing resistance to full adoption.

While these strategic purchasing mechanisms were put in place to save cost and improve quality of care, the reality exists in our context that some private providers in Kenya have monopoly power and operate under a fee-for-service payment mechanisms – which means that they can still dictate prices of services to purchasers leading to poor financial performance of the private purchasers.

CONCLUSION

Provider and purchaser power play a role in influencing the implementation outcomes of strategic purchasing. Purchasers should thus do an

assessment of these powers and be knowledgeable on different sources of power that exist within a particular market context so that they can use their own power to the fullest as well as anticipate providers use of power to resist implementation of mechanisms that may erode provider economic gains.

POLICY RECOMMENDATIONS

- Policy makers should assess and understand how the market distributes power between purchasers and providers. The solution to some of the challenges faced in the implementation of strategic purchasing mechanism may lie in the broader economic and regulatory context that allows for private providers to establish monopolies. An analysis of the broader economic and regulatory context for health is recommended.
- The NHIF should continue using its regulatory power to design strategic purchasing mechanisms, however this should be done in consultation with stakeholders, including private providers as this may result in the design of models that are deemed more acceptable.

- As problems persist with current implementation in Kenya, the NHIF should create mechanisms for incorporating provider feedback for improvement and refinement of the current NHIF outpatient capitation model
- While strategic purchasing mechanisms implemented by the private purchaser sought to reduce information asymmetry it is challenging to do this as private providers resist through delaying tactics. Private purchasers should thus continuously strengthen existing strategic purchasing mechanisms in order to make them more effective. For example, they could review existing fee for service models to include some forms of risk shifting to providers as well as implement strategies and technologies aimed at gaining more visibility of provider actions.
- In addition to using contracts to counter provider sources of power, private purchasers in Kenya should explore other strategies such as introduction of innovative provider payment methods (e.g. DRGs and capitation) that shift the risk of providing care to providers and explore ways of reducing their over reliance on a few private providers that command a monopoly in the market. The latter can be achieved by working with small and mid-sized private providers in Kenya who seemed more open to adopting new strategic purchasing mechanisms.

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